Vol. 91. Part 3. Pp. 65–104, 50 figs. 15th July, 1941

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OF THE

ROYAL ENTOMOLOGICAL SOCIETY

OF

LONDON

World List abbreviation: *Trans. R. ent. Soc. Lond.*

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LONDON:
PUBLISHED BY THE SOCIETY AND
SOLD AT ITS ROOMS, 41, QUEEN'S GATE, S.W.7

Price 10s. 0d.

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NEW GENERA AND SPECIES OF ELMIDAE (COLEOPTERA)

By H. E. Hinton, Ph.D.

(*Department of Entomology, British Museum (Nat. Hist.)*).

With 50 Text-figures.

Manuscript received 8th July, 1940.

Read 6th November, 1940.

This paper is one result of a re-arrangement undertaken during 1939 of the collection of Elmidae in the British Museum. Altogether 3 new genera and 20 new species are described, one little-known species is re-described, and notes are made on a number of other already described species. All the material consulted, including the types, is in the British Museum (Natural History).

For text-figures 1 and 7 I am indebted to Miss O. F. Tassart. All other illustrations were drawn by me with the aid of a camera lucida. The lines at the side of the figures refer to a length of 0·20 mm., unless otherwise indicated. The descriptions of the various species were drawn up under a magnification of × 75.

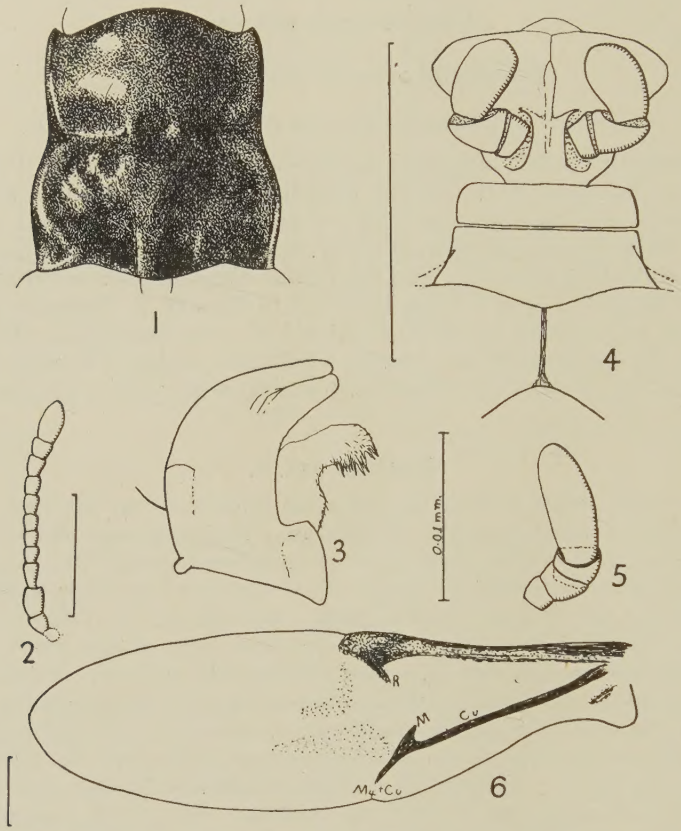
Notelmis gen. n.

Body obovate. Hairy or scale-like tomentum confined to the following areas: (1) genae with a small patch behind eyes; (2) epipleura; (3) sides of meso- and metasternum; (4) sides of abdominal sternites; and (5) part of coxae, femora, and tibiae. All tibiae with a dense fringe of tomentum on inner apices. *Head* when seen from below capable of being retracted so that none of mouth-parts is visible. Antennae (fig. 2) 11-segmented. Mandible (fig. 3) with three obtuse, apical teeth; prostheca large, entirely membranous, and apically along mesal margin with a few hairs and spine-like processes. Maxilla with palp (fig. 5) 4-segmented; galea slender and with a few apical spines, lacinia twice as broad and densely hairy at apex. Labium (fig. 4) with palp 3-segmented; mentum and submentum with proportions as shown in fig. 4. Gula absent because gula sutures (fig. 4) are confluent throughout their length. *Pronotum* (fig. 1) without sublateral carinae; with a deep and complete transverse impression on apical side of middle; with a feeble median impression on middle of disk; from base on each side of middle a broad and shallow impression extends anteriorly and outwards to transverse impression. Anterior margin feebly arcuate and broadly, shallowly sinuate on each side behind eye before apical angle; base broadly and deeply sinuate on each side and rounded in front of scutellum. *Elytra* striate and punctate; each elytron with two sublateral carinae, one on sixth and the other on eighth interval. Hind-wing (fig. 6) with a prominent anal lobe; without a radial cross-vein; with radio-medial cross-vein absent; and without a single distinct anal vein. *Prosternum* moderately long in front of anterior coxae; prosternal process long, moderately narrow, and with posterior margin rounded. Mesosternum with a broad and deep groove for reception of prosternal process. Abdomen with middle basal margin of first sternite very broad, rounded. *Legs* with visible part of front coxae very prominent, globular; front trochantin completely concealed by hypomera and sternum. Tarsi with fifth segment slightly shorter than combined length of four basal; claws without teeth.

Genotype: *Elmis nodipes* Sharp (1882).

The only known species of this genus, *N. nodipes*, closely resembles some of the species of *Microcylloepus* Hinton, but from the latter genus may be imme-

diately distinguished by the absence of sublateral carinae on the pronotum and the unusual reduction of the venation of the hind-wing. This is the only genus of the ELMIDAE known to me that—when the wing is fully developed—has not a distinct second anal vein.

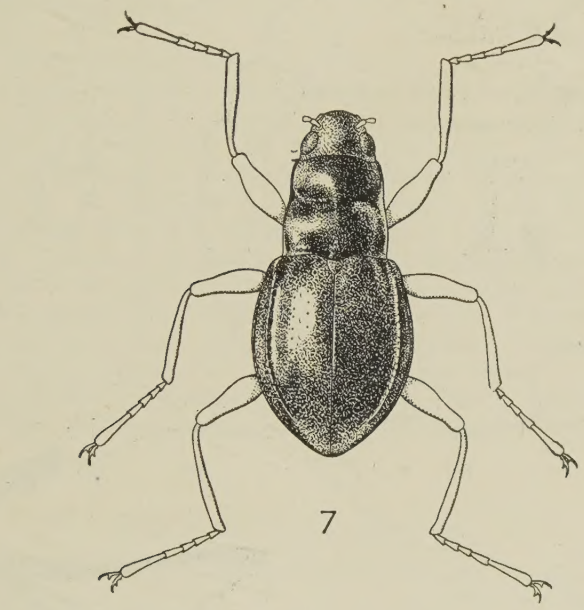


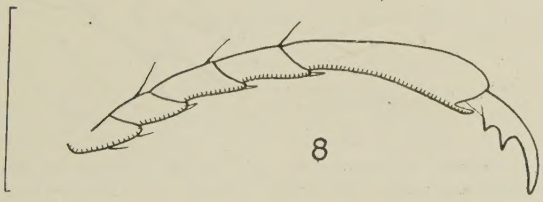
FIGS. 1–6.—*Notelmis nodipes* (Sharp). (1) Dorsal surface of pronotum. (2) Antenna. (3) Ventral view of right mandible. (4) Ventral view of labium and gula. (5) Maxillary palp. (6) Hind-wing. Venation after Forbes.

Onychelmis gen. n.

Body obovate. Tomentum confined to the following areas: (1) a small patch under eye on genae; (2) epipleura; (3) sides of prosternum, mesosternum, and metasternum; (4) sides of abdominal sternites; and (5) part of coxae, femora, and tibiae. Tomentum on inner apices of all tibiae denser than elsewhere. *Head* when seen from below capable of being retracted so that none of mouth-parts is visible. Antennae 11-segmented (?). Maxilla with palp 4-segmented; galea with a few apical spines; lacinia about twice as broad as galea and densely hairy apically. Labium with palp 3-segmented; mentum transverse, about as broad but less than half as long as submentum. Gula anteriorly about half as broad as submentum, subparallel. Pronotum (fig. 7) without sublateral carina or a median impression; with a deep and complete transverse impression on apical side of middle. Anterior margin feebly arcuate and on each side behind eye before apical angle broadly and shallowly sinuate; base broadly and shallowly sinuate on each side and

feebly rounded in front of scutellum. *Elytra* striate and punctate; each elytron with a prominent sublateral carina on sixth interval. *Prosternum* long in front of anterior coxae (about as long as breadth of front coxae); prosternal process long, moderately broad, and with posterior margin broadly rounded. Mesosternum with a broad and very deep groove for reception of prosternal process. Abdomen with middle basal margin of first sternite very broad and broadly rounded. *Legs* with visible part of front coxae very large and globular; front trochantin completely concealed by hypomera and sternum. Tarsi (fig. 8) with fifth segment slightly shorter than combined length of four basal; each claw with a broad and subbasal acute tooth and also with a well-developed basal tooth.





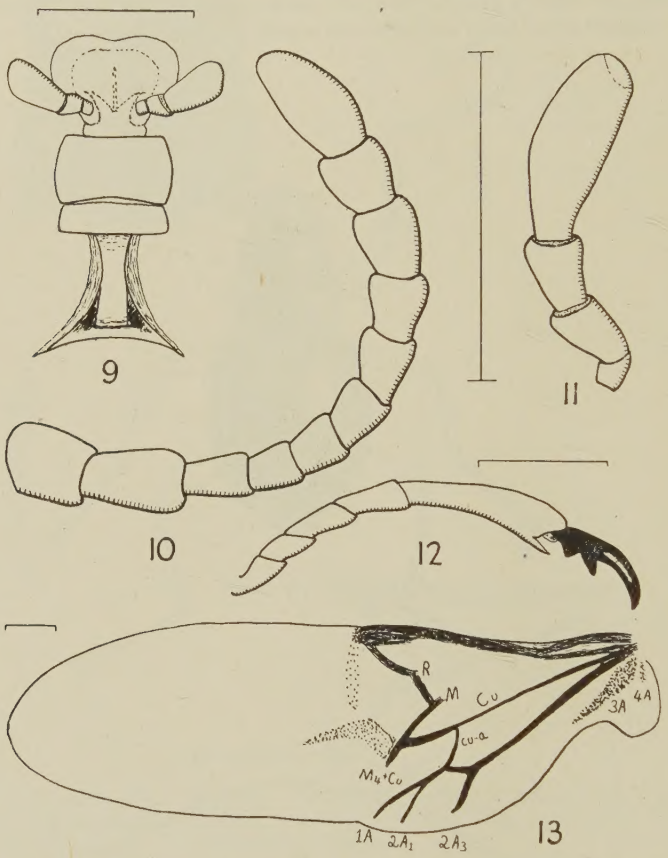
FIGS. 7–8.—*Onychelmis longicollis* (Sharp). (7) Dorsal view of type. Antennae are lost. (8) Hind tarsus.

Genotype: *Elmis longicollis* Sharp (1882).

Onychelmis and *Tolriolus* Hinton are the only two genera in the New World which have a subbasal tooth on each claw. *Onychelmis* may be distinguished from *Tolriolus* as follows: (1) the pronotum has no sublateral carinae; (2) there is a deep and complete transverse impression on apical half of pronotum; (3) the sublateral carina of each elytron is on sixth interval, whereas in *Tolriolus* it is on eighth interval; (4) the hypomera are nowhere clothed with tomentum; and (5) each claw has a basal as well as a subbasal tooth, whereas in *Tolriolus* there is no basal tooth.

Podelmis gen. n.

Body obovate. Without tomentum or pubescence; at most with a few fine, sparse hairs. *Head* when seen from below capable of being retracted so that none of mouthparts is visible. Antennae (fig. 10) 11-segmented. Mandible with three blunt apical teeth; prostheca large, entirely membranous, and with a few apical hair-like processes. Maxilla with the palp (fig. 11) 4-segmented; galea more or less cylindrical and with a few



FIGS. 9–13.—*Podelmis coronata* (Champion). (9) Ventral view of labium and gula. (10) Antenna. (11) Maxillary palp. (12) Hind tarsus. (13) Hind-wing. Venation after Forbes.

apical spines; lacinia twice as broad as galea and densely hairy apically. Labium (fig. 9) with palp 3-segmented; mentum transverse, rectangular, and twice as long as submentum. Gula (fig. 9) anteriorly a third as broad as submentum; with shape as figured. *Pronotum* without sublateral carinae; with or without an apical transverse impression; with or without a median impression; with basal oblique impressions. Anterior margin feebly arcuate and on each side behind eye before apical angle truncate to broadly and feebly sinuate; posterior margin broadly and shallowly sinuate on each side and truncate to scarcely noticeably sinuate in front of scutellum. *Elytra* striate and punctate; each elytron with a sublateral carina on ninth interval; with or without other raised intervals. Hind-wing (fig. 13) without a radial cross-vein or an anal cell; with a well-developed anal

lobe; first anal short, only present apically; second anal with first and third branches present and second branch absent; third anal feebly developed, not joined to second; fourth anal very feebly developed; and cubito-anal cross-vein complete and joining cubitus to first anal. *Prosternum* in front of anterior coxae short, length not equal to more than three-fourths of diameter of exposed portion of front coxae; prosternal process long, broad, and with posterior margin broadly rounded. Mesosternum with a deep and broad groove for reception of prosternal process. Abdomen with middle basal margin of first sternite very broad and feebly rounded. *Legs* with visible part of front coxae prominent and round; front trochantin completely concealed by hypomera and sternum. Tarsi (fig. 12) with fifth segment slightly shorter than combined length of four basal; each claw with a basal and subbasal acute tooth.

Genotype: *Elmis coronata* Champion (1923).

Podelmis is closely related to *Macronychoides* Champion (1923), particularly as regards the structure of the pronotum and prosternum and the venation of the hind-wings. *Podelmis* may be distinguished from *Macronychoides* as follows: (1) the mentum is at least twice as long as the submentum, whereas in *Macronychoides* the mentum is distinctly shorter than the submentum; (2) each elytron has a prominent sublateral carina on ninth interval, whereas in *Macronychoides* there is no sublateral carina; (3) the legs are entirely without tomentum or dense pubescence, whereas in *Macronychoides* the dorsal side of all femora and the inner apices of all tibiae are tomentose or densely pubescent; and (4) each claw has a basal and subbasal acute tooth, whereas in *Macronychoides* each claw has only one tooth which is very near base.

There are only four known species of *Podelmis*, all from the Palni Hills in S. India and all from altitudes between 6000 and 7000 feet. A key to the species is as follows.

A key to the species of *Podelmis*.

1. Elytra with third and fifth intervals moderately strongly convex
P. coronata (Champion) (1923).
–. Elytra with third and fifth intervals flat or nearly so . . . . . 2.
2. Disk of elytra and disk of metasternum with numerous granules
P. v-altum (Champion) (1923).
–. Disk of elytra and disk of metasternum with no granules . . . . . 3.
3. Apical half of pronotal disk with punctures about as coarse as facets of eyes and usually separated by one to one and a half diameters. Disk of elytra with second interval nearly twice as broad as first. Basal tooth of each claw prominent, about half as long as subbasal
P. torrentium (Champion) (1923).
–. Apical half of pronotal disk with punctures distinctly finer than facets of eyes and usually separated by two or more diameters. Disk of elytra with second interval only slightly broader than first. Basal tooth of each claw feebly developed, about a third as long as subbasal
P. palniensis (Champion) (1923).

Grouvellinus carus sp. n.

Male: Length, 1·86 mm.; breadth, 0·79 mm. Subparallel, moderately strongly convex. Cuticle shining, black with a strong aeneous lustre; antennae, mouth-parts, ventral surface, coxae, trochanters, and tarsi rufo-piceous to rufo-testaceous. *Head* without distinct impressions; surface feebly but very densely, often confluently, punctate;

surface also with a few low indistinct granules which are slightly finer than facets of eyes. Clypeus with fronto-clypeal suture feebly impressed, nearly straight; anterior margin nearly truncate and angle on each side broadly rounded; surface sculptured like front of head but anteriorly slightly more sparsely so and without granules. Labrum with anterior margin feebly rounded and angle on each side broadly rounded; surface nearly smooth on basal third and elsewhere with punctures about half as coarse as facets of eyes and separated usually by one to two diameters. *Pronotum* with broadest point, which is at about basal third, broader than long (0·60 mm. : 0·54 mm.) and base broader than apex (0·58 mm. : 0·43 mm.). Sublateral carinae present on basal third, narrow, feebly raised, and feebly converging anteriorly; moderately deep and broad oblique impression extending on each side from anterior end of carina to attain lateral margin at apical third; median discal impression oval, as broad as scutellum, shallow; near base on each side of scutellum with a feeble oblong impression which ends posteriorly in a deep, round puncture about a third as broad as scutellum. Surface of disk with shallow, round punctures which are about two-thirds as coarse as facets of eyes and usually separated by one to two diameters; punctures on bottom of impressions and near base and on sides denser, often confluent; surface of sides, particularly basal sides, with the punctures often replaced by low granules; surface on basal fourth near inner side of sublateral carina and on apical sublateral fourth distinctly more sparsely punctate than elsewhere. *Elytra* two and a half times as long as pronotum (1·37 mm. : 0·54 mm.) and broadest point, which is at apical two-fifths (0·79 mm.), only slightly broader than broadest point across humeri. Sublateral carinae moderately prominent and inner extending nearer apex than outer. Sides of elytra tomentose between inner margin of epipleura and outer sublateral carina, this tomentose band extending nearly to apex. Epipleura densely tomentose throughout. Intervals with the third near base broadly, moderately strongly elevated and second and third in this region only feebly elevated; surface of intervals transversely, coarsely, and moderately densely alutaceous; with hairs arranged in a row down centre of alternate intervals one, three, and five; surface of intervals at base with sparse granules as coarse as facets of eyes, towards apex these granules becoming finer and sparser so that they are nearly absent on apical half which is sparsely, very finely punctate. Striae narrow and shallow; strial punctures on basal half of disk deep, round, two-thirds as broad as intervals, and separated longitudinally by one to one and a half diameters; apically these punctures become finer and sparser so that on apical fourth they are only a fourth as broad as intervals and are separated longitudinally by three to four diameters. *Scutellum* flat, subovate, about as broad as long (0·109 mm.), and surface transversely and moderately densely and coarsely alutaceous. *Prosternum* with process moderately broad (not as broad as exposed part of front coxae), long, with sides feebly converging posteriorly, and posterior margin feebly and broadly rounded; prosternal carinae feeble, present on basal three-fourths, at base slightly wider apart than sides of process, and feebly converging anteriorly; surface of middle and that of process irregularly and moderately densely and coarsely alutaceous; sides of prosternum entirely tomentose and with a few fine granules. Hypomera with very fine tomentum on ventral half of anterior two-thirds; with round to feebly oblong granules slightly finer than facets of eyes and usually separated by less than one diameter. Metasternum with median longitudinal line complete, very fine, and scarcely noticeable; posterior two-thirds of middle disk with a moderately deep depression which is as broad as apex of fourth segment of middle tarsus; disk on each side with about eight large (about 0·03 mm. long), oval punctures and surface between them, particularly posteriorly, densely asperate while surface anteriorly is nearly smooth; metasternal sides near disk and anteriorly behind middle coxal cavity also coarsely punctate but elsewhere nearly smooth. Abdomen with carinae of first sternite complete, subparallel, moderately prominent; middle region of first sternite non-tomentose and feebly, irregularly rugose; elsewhere on this sternite and all of sternites two to five densely tomentose and finely, sparsely granulate.

Legs with tibiae and femora tomentose except for extreme apex of femora and extreme base of tibiae.

Female: Externally similar to male.

Type: ♂ in the British Museum (Nat. Hist.). CHINA: Foochow, 1937–38 (*M. S. Yang*).

Paratypes: One ♂ and one ♀ with same data as type. The female paratype is much paler than the other two specimens and is probably immature.

Comparative notes: This species most closely resembles *G. duplaris* Champion in general structure and shape, but from the latter it may be immediately distinguished by its smaller size and flat instead of convex fifth interval of the elytra.

Grouvellinus silius sp. n.

Male: Length, 1·80 mm.; breadth, 0·87 mm. Subparallel, moderately convex. Cuticle shining, brownish-piceous to rufo-piceous and dorsal surface with brassy lustre; antennae, mouth-parts, ventral surface, and legs paler brownish-piceous. *Head* without distinct impressions; surface irregularly alutaceous and with punctures distinctly finer than facets of eyes and confluent to separated by two diameters. Clypeus with fronto-clypeal suture fine, distinct, and nearly straight; anterior margin moderately deeply, arcuately emarginate for its entire breadth and angle on each side broadly rounded; surface more sparsely and finely punctate than head. Labrum with anterior margin broadly, feebly rounded and angle on each side broadly rounded. *Pronotum* with broadest point, which is across basal third, broader than long (0·63 mm.: 0·52 mm.) and base broader than apex (0·62 mm.: 0·43 mm.). Without sublateral carinae; on each side from basal third there extends obliquely outwards to lateral margin at anterior fourth a broad and very shallow, oblique impression. Surface of disk anteriorly with punctures about half as coarse as facets of eyes and confluent to separated by one diameter; towards base these punctures become denser; sides with round to feebly oblong granules which are slightly finer than facets of eyes and are usually separated by a fourth to nearly one diameter. *Elytra* more than twice as long as pronotum (1·34 mm.: 0·52 mm.) and with broadest point, which is at apical two-fifths (0·87 mm.), slightly broader than broadest point across humeri. Epipleura densely tomentose from base to apex; sides of elytra with only a very narrow fringe of tomentum on basal two-fifths next to inner margin of epipleura. Sublateral carinae feebly raised, outer less prominent than inner and not extending as far towards apex. Intervals flat, coarsely, transversely, and moderately densely alutaceous; with only an occasional microscopic puncture; at extreme base on first and fifth intervals with round granules as coarse as facets of eyes and usually separated by one diameter. Striae fine and indistinct; sutural stria more strongly impressed than others; strial punctures on disk round, moderately deep, a third to a half as broad as intervals, and separated longitudinally by one to one and a half diameters. *Scutellum* flat, subtriangular, broader than long (0·11 mm.: 0·095 mm.), and surface with a few microscopic punctures. *Prosternum* with process very broad (as broad as front coxae), nearly parallel-sided, and with posterior margin very feebly and broadly rounded; prosternal carinae present on basal two-thirds (not including process), caudally slightly wider apart than sides of process, and moderately strongly converging anteriorly; middle region of prosternum not distinctly punctate; sides with granules about two-thirds as coarse as facets of eyes, generally oblong, and usually separated by one to two diameters. Hypomera with only a narrow belt of tomentum along anterior half of ventral margin; surface granulate as sides of pronotum. Metasternum with median longitudinal line fine and complete; disk for a short distance on each side of middle nearly smooth but elsewhere and on mesal part of sides very coarsely (punctures sometimes 0·05 mm. broad), often confluently, punctate and with a few fine granules.

Abdomen with carinae of first sternite prominent, complete, and nearly parallel; middle region of this sternite and anterior middle region of second non-tomentose and sparsely granulate; abdomen elsewhere tomentose and finely granulate, the granules becoming slightly larger and denser towards middle of each sternite.

Female: Unknown.

Type: ♂ in the British Museum (Nat. Hist.). JAVA: Mons Gede 8000 ft., viii.1893 (*H. Fruhstorfer*).

Comparative notes: This is the first species of *Grouvellinus* to be recorded from Java. The absence of sublateral carinae (or sulci) on the pronotum, the extremely narrow belt of tomentum on the sides of the elytra and the anterior ventral margin of the hypomera, and the extremely broad prosternum will serve to distinguish it from all other known species.

Stenelmis Dufour (1835).

Wu (1932–33) has recorded three species of *Stenelmis* from China: *S. peropaca* Reitter (1907) and *S. puberula* Reitter (1887) originally described from Afghanistan and *S. trisulcata* Fairmaire (1888) originally described from Tonkin. In the case of the first two species Wu's Chinese record is based on the fact that they are recorded from the Tian-shan mountains. From the original records it is obvious that both were collected in the U.S.S.R. in Turkestan and not in that part of the Tian-shan range which extends into China. *S. trisulcata* is recorded by Wu from Peiping, but since the genus is a difficult one, Fairmaire's description very poor, and the distribution of this species so far north very unlikely, I consider this record must await further confirmation before being accepted.

In the Chinese collections before me there are seven new species represented by 19 specimens. A key to these follows.

A key to the species of Chinese *Stenelmis*.

1. Sublateral carinae of pronotum extending from base nearly to apex and at basal third at most shallowly interrupted. Tarsi with ventral apex of fifth segment strongly produced . . . . . 2.
–. Sublateral carinae of pronotum not extending to apical fourth and at basal third very deeply, often completely, interrupted. Tarsi with ventral apex of fifth segment not or only very feebly produced . . . . . 4.
2. Species large, 3·7–4·0 mm. Dorsal surface red or reddish-brown. Each elytron with a basal accessory stria between first and second striae; basal part of third elytral interval strongly convex. Male with an oblique carina on hind trochanter. Foochow . . . . . *S. sulmo* sp. n.
–. Species small, 2·5 mm. or less. Dorsal surface greyish-brown. Elytron without a basal accessory stria; basal part of third elytral interval feebly convex, only slightly more convex than adjacent intervals. Male without an oblique carina on hind trochanter . . . . . 3.
3. Pronotum with a broad, feeble, oblong gibbosity on apical third parallel to median longitudinal impression and nearer to this impression than to sublateral carinae. Foochow . . . . . *S. troilus* sp. n.
–. Pronotum with apical third between median longitudinal impression and sublateral carinae evenly convex, without gibbosities. Foochow *S. priapus* sp. n.
4. Each elytron at base with a well-developed accessory stria between first and second striae . . . . . 5.
–. Each elytron without an accessory stria at base . . . . . 6.

5. Pronotum on middle sides of disk without granules and with punctures which are distinctly coarser than facets of eyes and are usually separated by one diameter. Basal half of elytral disk without granules. Scutellum opaque. Middle sides of metasternal disk densely but seldom confluently punctate with punctures which are slightly coarser to nearly twice as coarse as facets of eyes. Foochow . . . . . *S. tros* sp. n.

–. Pronotum on middle sides of disk with numerous fine granules and with no punctures as coarse as facets of eyes. Basal half of elytral disk with numerous granules. Scutellum shining. Middle sides of metasternal disk densely, often confluently, punctate with punctures which are finer to slightly coarser than facets of eyes. Foochow . . . *S. capys* sp. n.

6. Species large, 3·0 mm. or more. Antennae with apical segments black. Pronotum with median longitudinal impression broad, shallow, and confined to middle third. Elytral intervals moderately sparsely and finely pubescent. Male with an acute vertical tooth on middle anterior margin of prosternum; with an acute tooth on mesal margin of hind coxa; with a dense brush of long, testaceous hairs at apex of hind tibia; without a carina on hind trochanter and without a tooth on inner side of middle of hind tibia. Foochow . . . . . *S. casius* sp. n.

–. Species small, less than 2·5 mm. Antennae unicolorous. Pronotum with median longitudinal impression moderately deep and narrow and extending from base to apical fourth. Elytral intervals densely and very finely pubescent. Male with an acute median tooth behind anterior margin of prosternum; without a tooth on hind coxa and without a long brush of hairs on apex of hind tibia; with a short, oblique carina on hind trochanter; with an acute tooth on inner middle sides of hind and middle tibia. Foochow *S. anytus* sp. n.

Stenelmis sulmo sp. n. (fig. 14).

Male: Length, 3·8 mm.; breadth, 1·50 mm. Cuticle opaque to feebly shining, red-brown; antennae, mouth-parts, and tarsi rufo-piceous. *Head* with a broad, very shallow, median longitudinal impression on front; surface with nearly round, prominent granules which are slightly finer to as coarse as facets of eyes and are usually separated by about one diameter; surface between granules densely asperate. Clypeus with fronto-clypeal suture feebly impressed, nearly straight; anterior margin very feebly rounded at middle and broadly, shallowly sinuate on each side before apical angle; anterior angles obtusely rounded; surface sculptured like head but on middle with granules very indistinct. Labrum with anterior margin feebly rounded and angle on each side broadly rounded; surface densely, microscopically alutaceous on basal region and elsewhere more sparsely so; surface on most of middle region with round punctures which are slightly but distinctly finer than facets of eyes and are usually separated by one diameter. *Pronotum* with broadest point, which is across basal two-fifths, as broad as long (0·17 mm.) and base broader than apex (1·12 mm.: 0·82 mm.). Sides more or less evenly arcuate, nowhere distinctly sinuate. Sublateral carinae extending from base nearly to apex, broad, prominent, and moderately shallowly interrupted at basal third; median longitudinal impression extending from base to apical fifth, at middle nearly as broad as scutellum and two-thirds as deep as broad, and nearly parallel but feebly narrowed on basal fourth. Surface sculptured like head but with granules generally, particularly at sides, sparser; from each granule arises a fine, testaceous, recumbent seta which is about two or three times as long as its respective granule. *Elytra* twice as long as pronotum (2·65 mm.: 1·17 mm.). Sublateral carina (which extends mostly on sixth interval) moderately prominent and extending to a point opposite posterior margin of third abdominal sternite. Accessory stria at base distinct, of four to six punctures. Third interval moderately

strongly and broadly convex on basal seventh, other intervals flat or nearly so except for accessory interval which is feebly convex; surface of intervals with round granules as coarse as facets of eyes and usually separated by two to three diameters; surface between granules densely, microscopically punctate; surface with two types of pubescence as follows: (1) from posterior margin of each granule arises a fine, recumbent, testaceous seta which is about two times as long as granule; and (2) between granules with very short (as long to half as long as granules), recumbent, testaceous setae which are moderately dense. Discal striae broad and scarcely noticeably impressed; strial punctures on basal half of disk deep, round to subquadrate, from two-thirds as broad to slightly broader than intervals, and separated longitudinally by one to slightly less than one diameter. Scutellum feebly raised, top flat, subovate, longer than broad (0·21 mm. : 0·19 mm.), and surface opaque like

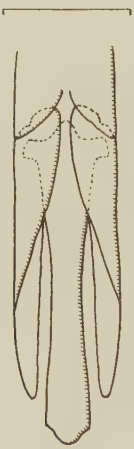


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Fig. 14.—*Stenelmis sulmo* sp. n. Dorsal view of male genitalia.

adjacent part of pronotum. *Ventral surface* sculptured like pronotum but distinctly, though slightly, more coarsely granulate. Prosternum without carinae; with process broad, subparallel, and with its posterior margin broadly rounded except for middle which is narrowly and shallowly sinuate. Metasternum with the median longitudinal line deep, complete, moderately broad; disk nearly vertically declivous behind mesosternum; disk with a broad, oval, moderately shallow depression occupying most of each side. Abdomen with middle region of first sternite deeply and broadly depressed; carinae of first sternite broad, moderately prominent, nearly complete. Middle apical margin of fifth sternite broadly and deeply emarginate. *Legs* with a very high, sharp, oblique carina on posterior margin of hind trochanter. Inner side of hind tibia with a row of short teeth extending from near base to near apex. Tarsi with fifth segment distinctly shorter than combined length of four basal; ventral apex of fifth segment broadly and strongly produced at middle; claws slender, without a basal tooth. *Genitalia* as figured (fig. 14).

Female: Externally similar to male except as follows: (1) hind trochanter without trace of carina on posterior margin; and (2) hind tibia without row of teeth on inner side.

Type: ♂ in the British Museum (Nat. Hist.). China: Foochow, 10–14.vii.1936 (*M. S. Yang*).

Paratypes: 1 ♂ and 1 ♀ with data as above, and 1 ♂ and 1 ♀ with same data but collected 1935–36.

Variations: The median longitudinal impression of the head is scarcely noticeable in some of the paratypes. The depression on each side of metasternal disk, as well as that of middle region of first abdominal sternite, varies greatly in depth in the short series before me.

Comparative notes: Its large size, red colour, complete sublateral carinae of the pronotum, accessory elytral striae, and produced ventral apex of fifth tarsal segment will, when taken together, easily distinguish *S. sulmo* from any known species.

Stenelmis troilus sp. n.

Female: Length, 2·38 mm.; breadth, 0·87 mm. Cuticle opaque to feebly shining, colour greyish-red to grey; antennae, mouth-parts, and tarsi rufo-testaceous. *Head* without distinct impressions; surface with round prominent granules which are about two-thirds as coarse as facets of eyes and are usually separated by two to three diameters; surface between granules microscopically (scarcely visible at × 75), very densely punctate. Clypeus with fronto-clypeal suture feebly impressed, nearly straight; anterior margin nearly truncate, angle on each side obtusely rounded; surface sculptured like head. Labrum with anterior margin feebly rounded and angle on each side broadly rounded; surface without granules but with punctures which are about half as coarse as facets of eyes and are usually separated by one to two diameters. *Pronotum* with broadest point, which is across middle, slightly broader than long (0·73 mm. : 0·71 mm.) and base broader than apex (0·71 mm. : 0·54 mm.). Sides more or less evenly arcuate, nearly straight before hind angles and very shallowly, scarcely noticeably sinuate before apical angles. Sublateral carinae extending from base nearly to apex, broad, prominent, with inner sides sharp, and scarcely noticeably impressed on basal third; median longitudinal impression extending from basal sixth to apical sixth, sides nearly parallel, at middle about four-fifths as broad as scutellum, and generally nearly as deep as broad; on each side of impression from apical two-fifths to apical sixth extends a broad, low gibbosity; base in front of scutellum to median impression at basal sixth strongly elevated and with top flat; impressions near base on each side of scutellum oval, very deep, and about half as broad as scutellum. Surface sculptured like head but at sides with granules usually denser and on middle with granules often very indistinct, nearly absent. *Elytra* more than twice as long as pronotum (1·67 mm. : 0·71 mm.). Sublateral carinae prominent and extending to a point opposite posterior margin of third abdominal sternite. Each elytron without a basal accessory stria. Intervals flat or nearly so, third very feebly convex at base; surface of intervals with microscopic punctures which are usually separated by one to two diameters and on basal three-fifths with granules about as coarse as those of pronotum and generally separated by two to seven diameters; pubescence chiefly composed of fine, recumbent, greyish-testaceous, moderately dense hairs which arise from microscopic punctures. Striae broad, shallow, scarcely noticeably impressed; discal strial punctures on basal third very deep, round to subquadrate, as broad to two-thirds as broad as intervals, and separated longitudinally by one to slightly less than one diameter. *Scutellum* flat, subovate, longer than broad (0·137 mm. : 0·11 mm.); surface opaque and sculptured like adjacent elytral intervals. Prosternum without carinae; process broad, subparallel, with posterior margin broadly rounded except for middle which is narrowly and shallowly sinuate; surface for the most part granulate like sides of pronotum. Hypomera slightly more densely and coarsely granulate than sides of pronotum. Metasternum with median longitudinal line complete, narrow, and shallow; disk nearly flat; surface of disk granulate like prosternal sides. *Abdomen* with middle region of first sternite moderately strongly depressed; carinae of first sternite low, moderately broad, and not extending to posterior margin of segment. Apical middle margin of fifth sternite broadly, deeply emarginate. Surface of sternites granulate like sides of prosternum but towards middle of sternites two to five granules

become finer and much less distinct. *Legs* with fifth tarsal segment slightly shorter than combined length of four basal (hind tarsi, 0·27 mm. : 0·32 mm.); ventral apex of fifth tarsal segment broadly and strongly produced; claws slender, without a distinct basal tooth.

Male: Unknown.

Type: ♀ in the British Museum (Nat. Hist.). China: Foochow, 1937–38 (*M. S. Yang*).

Comparative notes: This is close to no other described species and the following combination of characters will readily distinguish it from all known species: (1) sublateral carinae of pronotum very nearly complete and only very feebly interrupted at basal third; (2) pronotum with a broad gibbosity

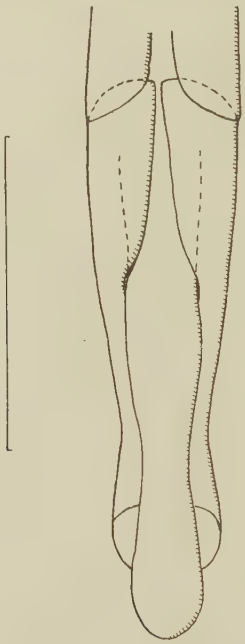

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Fig. 15.—*Stenelmis priapus* sp. n. Dorsal view of male genitalia.

parallel to the median longitudinal impression; (3) elytra without accessory striae and with the sublateral carinae prominent; and (4) ventral apex of fifth segment of all tarsi very strongly produced at middle.

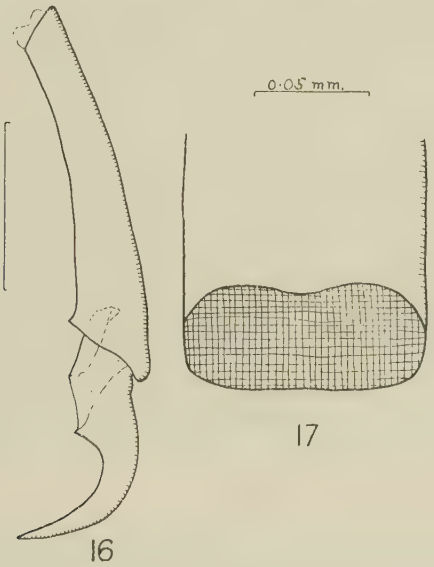
Stenelmis priapus sp. n. (fig. 15).

Male: Length, 2·16 mm.; breadth, 0·84 mm. Cuticle opaque to feebly shining, colour greyish-red to grey; antennae, mouth-parts, and tarsi rufo-testaceous. Externally extremely close to *S. troilus* sp. n., from which it may be separated by the absence of a longitudinal gibbosity on apical third of pronotum parallel to median longitudinal impression, the disk of *S. troilus* sp. n. being evenly convex. The male type has a row of short teeth on inner side of hind tibia, as have most males of *Stenelmis*.

Type: ♂ in the British Museum (Nat. Hist.). China: Foochow, 1937–38 (*M. S. Yang*).

Stenelmis tros sp. n. (figs. 16–17).

Female: Length, 3·5 mm.; breadth, 1·31 mm. Cuticle feebly to strongly shining, colour brown or piceous; two basal segments of antennae, mouth-parts, and tarsi rufopiceous; ventral surface for the most part reddish-brown. *Head* without distinct impressions; surface with round granules which are slightly but distinctly finer than facets of eyes and are usually separated by one to two diameters; surface between punctures microscopically, densely punctate. Clypeus with fronto-clypeal suture very narrow, feebly impressed, and nearly straight; anterior margin, when seen from front, very shallowly, arcuately emarginate for entire breadth; anterior angles broadly rounded; surface sculptured like head. Labrum with anterior margin feebly rounded and angle on each side broadly rounded; surface without distinct granules and most of middle region with



Figs. 16–17.—*Stenelmis tros* sp. n. (16) Lateral view of fifth segment of front tarsus. (17) Ventral view of apex of fifth segment of front tarsus.

punctures which are about as fine as granules of head and are usually separated by one to slightly less than one diameter. *Pronotum* with broadest point, which is across basal third (or across base), not as broad as long (0·98 mm. : 0·99 mm.) and base broader than apex (0·98 mm. : 0·82 mm.). Sides broadly and very deeply sinuate at anterior third and broadly, shallowly, scarcely noticeably sinuate before basal angles. Sublateral carinae extending from base to apical two-fifths, broad, prominent, and broadly and completely interrupted at basal third; a narrow, moderately raised gibbosity extends posteriorly and inwards from apical angle on each side to near anterior end of sublateral carina. Median longitudinal impression extending from base to apical fourth; at middle nearly as broad as scutellum and nearly as deep as broad; subparallel but on posterior fourth slightly narrowed and near base very shallow. Near base on each side of scutellum with a deep, oval puncture which is about a third as broad as scutellum. Disk on middle with shallow round punctures which are slightly but distinctly coarser than facets of eyes and are usually separated by one diameter; surface between these punctures densely, microscopically punctate; anterior sides with punctures slightly coarser and denser; basal sides with coarse punctures sometimes replaced by granules of equal size; surface everywhere with two types of pubescence

as follows: (1) from each large puncture arises a fine, brownish-golden, recumbent hair which is slightly larger than puncture; and (2) from each microscopic puncture arises a similar hair which is only about half as long. *Elytra* more than twice as long as pronotum (2·49 mm.: 0·99 mm.). Sublateral carina prominent and extending to a point opposite fourth abdominal sternite. Each elytron with an accessory basal stria composed of five or six punctures. Intervals with third convex on basal half, strongly raised near base; other intervals flat or nearly so; surface of intervals with microscopic punctures which are usually separated by one to two diameters and each gives rise to a fine hair like those of microscopic punctures of pronotum but slightly longer; surface of elytra with the pubescence distinctly sparser than that of pronotum. Striae broad, scarcely noticeably impressed; strial punctures on basal half of disk deep, round to subquadrate, about as broad as intervals, and separated longitudinally usually by one or slightly less than one diameter. *Scutellum* flat, subovate, longer than broad (0·19 mm.: 0·17 mm.), and surface opaque. *Prosternum* without carinae; process broad, subparallel, and with posterior margin broadly rounded; surface rugose and granulate, the granules being as coarse to half as coarse as facets of eyes and separated by less than a diameter to (anteriorly) three or four diameters. Hypomera rugosely granulate and punctate like sides of prosternum; anterior two-fifths with granules nearly absent. Metasternum with median longitudinal line moderately narrow, deep, and complete; sides of disk feebly depressed on posterior fourth; surface of disk with round to oval punctures which are slightly coarser to twice as coarse as facets of eyes and are separated usually by a fourth to a third of a diameter; sides of metasternum with rounder and slightly smaller punctures. *Abdomen* with middle region of first sternite feebly depressed; carinae of first sternite broad, feebly raised, and extending to posterior fourth of segment. Middle region of first sternite punctate like metasternal disk; elsewhere, and surface of other sternites, much more finely and sparsely punctate. Apical middle margin of fifth sternite with a deep emargination which is as broad as base of fifth tarsal segment. *Legs* with fifth tarsal segment slightly shorter than combined length of four basal (hind tarsi, 0·43 mm.: 0·52 mm.); fifth tarsal segment (figs. 16–17) with ventral apex not distinctly produced. Claws stout and each with a feebly developed basal tooth.

Male: Unknown.

Type: ♀ in the British Museum (Nat. Hist.). China: Foochow, 1935–36 (*M. S. Yang*).

Comparative notes: This is close to no species known to me.

Stenelmis capys sp. n. (fig. 18).

Male: Length, 3·7 mm.; breadth, 1·26 mm. Cuticle feebly to strongly shining, colour black to rufo-piceous; antennae, mouth-parts, and legs slightly paler; pubescence of dorsal surface brownish to golden-grey. *Head* without distinct impressions; surface with round granules which are about two-thirds as coarse as facets of eyes and are usually separated by one to two diameters; surface between granules finely and confluently punctate. Clypeus with fronto-clypeal suture very indistinct, nearly straight; anterior margin nearly truncate and angle on each side broadly rounded; surface sculptured like middle region of head. Labrum with anterior margin, when seen from front, very feebly rounded and angle on each side broadly rounded; surface for the most part with round punctures about half to two-thirds as coarse as facets of eyes and usually separated by one diameter. *Pronotum* with broadest point, which is across basal third, not quite as broad as long (0·90 mm.: 0·97 mm.) and base broader than apex (0·87 mm.: 0·73 mm.). Sides deeply and broadly sinuate on most of apical third and also broadly but more shallowly sinuate on basal third. Sublateral carinae moderately broad and prominent, extending from base to

apical two-fifths, and at basal third broadly and completely interrupted; each side on apical sixth with a broad, feebly raised gibbosity which extends from lateral margin to a point nearly opposite end of sublateral carina. Near base on each side of scutellum with a deep, oval puncture which is about half as broad as scutellum. Median longitudinal impression extending from base to apical third, at middle nearly as broad as scutellum, subparallel, and about three-fifths as deep as broad; on basal third slightly narrower and becoming shallower towards base so that immediately in front of scutellum it is very shallow. Surface confluently punctate like head and towards basal sides with numerous round granules which are slightly finer than facets of eyes. *Elytra* more than twice as long as pronotum (2·5 mm. : 0·97 mm.). Sublateral carina moderately prominent behind basal fourth and extending to a point opposite middle of fourth abdominal sternite. Each elytron with an accessory basal stria composed of two to six punctures. Intervals with third moderately convex on basal third, other intervals flat or nearly so; surface of intervals with microscopic punctures which are usually separated by one to two diameters and also with round

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Fig. 18.—*Stenelmis capys* sp. n. Dorsal view of male genitalia.

granules as coarse to half as coarse as facets of eyes and usually separated by two to five diameters, though on apical third sparser and finer; intervals about as densely pubescent as pronotum. *Scutellum* flat to feebly depressed on middle, subovate, broader than long (0·18 mm. : 0·16 mm.), and surface moderately shining and sculptured like adjacent elytral intervals. *Prosternum* without carinae; process broad, subparallel, and posterior margin narrowly and deeply emarginate; surface rugose and granulate with granules generally as coarse as facets of eyes (anteriorly on middle sparse and half as coarse or absent) and usually separated by one to less than one diameter. Hypomera sculptured like sides of pronotum. Metasternum with median longitudinal line narrow, moderately well impressed, and complete; disk moderately depressed on posterior middle two-fifths; surface of disk with round to slightly oval punctures which are slightly coarser to half as coarse as facets of eyes and are usually confluent to separated by half a diameter; anterior margin of some of large punctures feebly raised so that surface occasionally appears feebly granulate; sides of metasternum similarly but more densely punctate and with anterior margins of punctures seldom raised. *Abdomen* with middle region of first sternite moderately depressed; lateral carinae broad, feebly raised, and extending to posterior third of segment. Emargination of middle apical margin of fifth sternite moderately deep and as broad as apex of fifth tarsal segment. Surface of middle region of first sternite slightly more coarsely

punctate than metasternal disk; surface elsewhere more finely punctate. *Legs* with a small setose tubercle on middle of hind coxa near mesal margin. Hind tibia without a row of short teeth on inner side. Tarsi with fifth segment slightly but distinctly shorter than combined length of four basal (hind tarsi, 0·56 mm. : 0·65 mm.); ventral apex of fifth segment not produced. Claws short and with a feeble basal tooth (or angulate at base). *Genitalia* (fig. 18) as figured.

Female: Externally similar to male but with middle region of first abdominal sternite much less depressed and hind coxa without a small tubercle on middle near mesal margin.

Type: ♂ in the British Museum (Nat. Hist.). China: Foochow, 1936–37 (*M. S. Yang*).

Paratypes: 3 ♀♀ with same data as above.

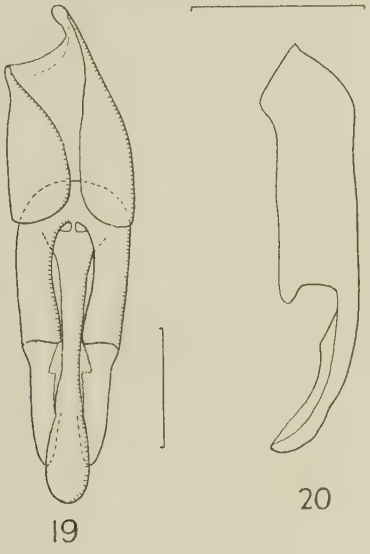
Variations: The basal segments of the antennae of two specimens are distinctly paler than the apical. Two of the paratypes have the posterior margin of the prosternal process only feebly emarginate at middle.

Comparative notes: This is most closely related to *S. tros* sp. n., but from the latter it may be distinguished as shown in the key given above.

Stenelmis casius sp. n. (figs. 19–20).

Male: Length, 3·0 mm.; breadth, 1·04 mm. Cuticle feebly to strongly shining, black to rufo-piceous; basal segments of antennae, mouth-parts, and tarsi paler rufo-piceous; elytra with fifth, seventh, and eighth intervals slightly paler on apical half. *Head* without distinct impressions; surface with round to irregularly shaped granules which are as coarse to half as coarse as facets of eyes and are usually separated by one to two or more diameters; surface between granules finely and confluently punctate. Clypeus with fronto-clypeal suture feebly impressed, nearly straight; anterior margin nearly truncate and angle on each side broadly rounded; surface sculptured like head. Labrum with anterior margin when seen from front nearly truncate and angle on each side broadly rounded; surface with middle basal fourth nearly smooth and most of middle region with punctures which are half to two-thirds as coarse as facets of eyes and are usually separated by one to two diameters; surface between punctures nearly smooth. *Pronotum* with broadest point, which is across basal third (or base), not as broad as long (0·71 mm. : 0·84 mm.) and base broader than apex (0·71 mm. : 0·61 mm.). Sides broadly, moderately deeply sinuate at apical fourth and broadly, very shallowly sinuate before basal angles. Sublateral carinae extending from base to apical two-fifths feebly raised and inconspicuous, moderately broad, and broadly and completely interrupted at basal third; on apical sixth near lateral margin with a feeble, short, transverse gibbosity. Median longitudinal impression confined to middle third, shallow, obovate, and not as broad as scutellum; near base on each side of scutellum with a deep, oval puncture which is more than a third as broad as scutellum. Surface sculptured like head but with granules slightly coarser and between granules usually densely, microscopically asperate; pubescence sparse and each hair testaceous, recumbent, and arising from a granule. *Elytra* more than twice as long as pronotum (2·21 mm. : 0·84 mm.). Sublateral carinae absent basally, only feebly raised behind basal third, and extending to a point opposite posterior margin of third abdominal sternite. Each elytron with a basal accessory stria. Intervals with third moderately broadly and strongly convex on basal fifth, second and fourth feebly convex near base, and others flat or nearly so; surface of intervals feebly, irregularly, transversely alutaceous and with round granules which are as coarse as facets of eyes or much finer and are separated by two to three diameters; these granules become very much finer towards apex where they are often replaced by microscopic punctures; pubescence of elytra due to fine, recumbent hairs arising from these granules and punctures and on the whole slightly sparser and coarser

than that of pronotum. Striae broad, feebly impressed; strial punctures on basal half of disk deep, usually round, slightly narrower to slightly broader than intervals, and separated longitudinally by one to slightly less than one diameter. *Scutellum* flat, subovate, as broad as long (0·16 mm.), and surface opaque and with a few low granules. *Prosternum* without carinae; anterior margin at middle with a stout tooth about 0·05 mm. long which is directed vertically downwards; process moderately broad, sides converging posteriorly, and posterior margin broadly rounded though with middle shallowly, narrowly sinuate; surface coarsely rugose and with granules which are as coarse as facets of eyes and are separated by one to two diameters, occasionally more. Hypomera sculptured like sides of prosternum. Metasternum with median longitudinal line complete, deep and broad posteriorly and narrower, shallower anteriorly; disk with posterior middle three-fifths moderately strongly depressed; surface of disk with round to oval punctures which are usually about half again as coarse as facets of eyes and are usually separated by one to less



Figs. 19–20.—*Stenelmis casius* sp. n. (19) Dorsal view of male genitalia. (20) Dorsolateral view of right paramere.

than one diameter; surface behind each puncture with a flat, black callosity about as large as puncture; sides of metasternum similarly but more finely sculptured. Abdomen with middle region of first sternite moderately feebly depressed; without distinct lateral carinae. Fifth sternite with emargination of middle apical margin as broad as apex of fifth tarsal segment. Surface of middle region of first sternite sculptured like metasternal disk; surface elsewhere on this sternite and that of other sternites similarly but distinctly more finely sculptured. *Legs* with a large tubercle on middle mesal margin of hind coxa; from this tubercle arise numerous short, testaceous hairs which are so dense as to appear fused. Inner side of middle and hind tibiae without a row of short teeth; inner apical margin of hind tibia with a brush of long, testaceous hairs. Tarsi with fifth segment shorter than combined length of four basal (hind tarsi, 0·46 mm. : 0·68 mm.); ventral apex of fifth segment not produced. Claws stout and each with a feeble, acute basal tooth. *Genitalia* (figs. 19–20) as figured.

Female: Externally similar to male except as follows: (1) middle anterior margin of prosternum without tooth; (2) posterior part of metasternal disk not so strongly depressed;

(3) mesal margin of hind coxa without tubercle; and (4) inner apex of hind tibia without brush of long hairs.

Type: ♂ in the British Museum (Nat. Hist.). China: Foochow, 1935–36 (*M. S. Yang*).

Paratypes: 1 ♂ and 3 ♀♀ with same data as above.

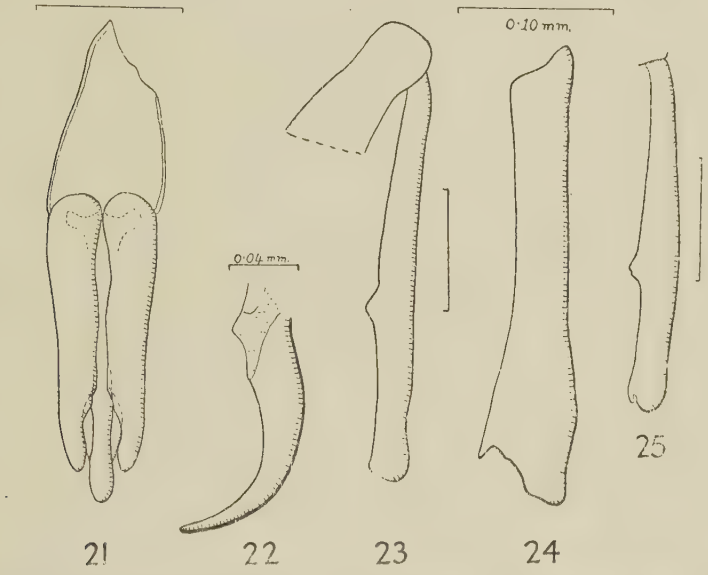
Variations: One of the female paratypes has the median longitudinal impression of the pronotum extending to basal fourth and the third elytral interval is only very feebly convex. In another female paratype the sublateral carinae of the elytra are more prominent than in the type and are distinctly though feebly raised from posterior part of humeri.

Comparative notes: This is close to no species known to me. The secondary sexual characters will distinguish it from all other known species.

Stenelmis anytus sp. n. (figs. 21–25).

Female: Length, 2·32 mm.; breadth, 0·87 mm. Cuticle opaque to moderately shining, colour black to rufo-piceous; antennae, mouth-parts, and tarsi brownish-testaceous. *Head* without distinct impressions; surface densely, microscopically asperate and with a few fine, indistinct granules. Clypeus with fronto-clypeal suture indistinct, nearly straight; anterior margin, when seen from front, nearly straight and angle on each side broadly rounded; surface sculptured like front of head. Labrum with anterior margin feebly rounded and angle on each side broadly rounded; surface sculptured like front of head but with a narrow middle band more sparsely punctate and extreme anterior margin nearly smooth. *Pronotum* with broadest point, which is across basal third, not quite as broad as long (0·65 mm.: 0·71 mm.) and base broader than apex (0·63 mm.: 0·52 mm.). Sides moderately feebly, very broadly sinuate on apical third and broadly, scarcely noticeably sinuate before basal angles. Sublateral carinae extending from base to apical half, broad, moderately prominent, and at basal third broadly, nearly completely interrupted; from anterior angle on each side a low, moderately broad gibbosity extends posteriorly and inwards to a point opposite anterior end of sublateral carina. Median longitudinal impression extending from base nearly to anterior fourth, broadest at middle of disk where it is about four-fifths as broad as scutellum, at middle about half as deep as broad, and on basal third only about half as broad as at middle. Near base on each side with a deep, oval depression which is about half to a third as broad as scutellum. Surface with numerous microscopic punctures and basal half, sides, and bottom of median impression with numerous granules which are about two-thirds as coarse as facets of eyes; surface opaque; pubescence composed of fine, short, recumbent, moderately sparse hairs. *Elytra* more than twice as long as pronotum (1·67 mm.: 0·71 mm.). Sublateral carinae moderately prominent and extending to a point opposite posterior margin of third abdominal sternite. Each elytron with a basal accessory stria. Intervals flat, with third feebly convex at base; surface of intervals transversely, moderately sparsely alutaceous and with microscopic punctures (scarcely visible at × 75) which are confluent to separated by two diameters; with sparse low granules which are about half to two-thirds as coarse as facets of eyes; pubescence moderately dense (distinctly denser than that of pronotum), brownish-grey. Striae broad and feebly impressed; strial punctures on basal half of disk deep, round to subquadrate, as broad to two-thirds as broad as intervals, and separated longitudinally by slightly more to slightly less than one diameter. *Scutellum* flat, subovate, broader than long (0·137 mm.: 0·12 mm.), and surface opaque and granulate like adjacent part of pronotum. *Prosternum* without carinae; process broad, subparallel, and posterior margin shallowly sinuate on middle; surface of basal fifth and of process rugose granulate with granules which are nearly as coarse as facets of eyes and are separated by less than one to two diameters; surface of anterior four-fifths sculptured and pubescent like pronotum.

Hypomera with surface slightly more coarsely and densely granulate than sides of pronotum. Metasternum with median longitudinal line complete, narrow, and moderately deep; disk nearly flat; surface of disk with punctures about a third as coarse again as facets of eyes, oval, and separated usually by one diameter; metasternal sides similarly but more finely punctate and also with dense, fine granules. *Abdomen* with middle region of first sternite feebly depressed; first sternite without lateral carinae. Emargination of apical middle margin of fifth sternite as broad as base of fifth tarsal segment. Surface of middle region of first sternite with punctures about a third coarser and denser than those of metasternal disk; surface elsewhere on this sternite and surface of other sternites sculptured and pubescent like anterior region of prosternum. *Legs* with fifth tarsal segment distinctly shorter than combined length of four basal (hind tarsi, 0·30 mm. : 0·38 mm.);



Figs. 21–25.—*Stenelmis anytus* sp. n. (21) Dorsal view of male genitalia. (22) Lateral view of claw of hind leg. (23) Lateral view of hind tibia of male. (24) Lateral view of fifth segment of hind tarsus. (25) Lateral view of middle tibia of male.

ventral apex of fifth segment (fig. 24) feebly produced at middle. Claws (fig. 22) slender and without a basal tooth.

Male: Externally similar to female except as follows: (1) with a prominent tooth on prosternum near middle anterior margin; (2) hind trochanter with a very short, oblique, high carina on middle posterior face; (3) middle tibia (fig. 25) with a tooth on inner apical half; and (4) hind tibia (fig. 23) with a tooth on inner apical half.

Type: ♀ in the British Museum (Nat. Hist.). China: Foochow, 1937–38 (*M. S. Yang*).

Paratype: ♂ with same data as above but collected on 10–14.vii.1936 (*M. S. Yang*).

Comparative notes: This may be distinguished from all other Chinese species as shown in the key given above. The combination of secondary sexual characters possessed by the male is unique among described species of the genus.

Stenelmis fissicollis Champion (1923).

This species was described from a single specimen, a male, from India: United Provinces, W. Almora Division of Kumaon. Before me are three females which agree well with the type. They are from India: United Provinces, Chakrata Division of Jaunsar, 13.v.1929 (*H. G. Champion*).

Stenelmis gardneri sp. n. (fig. 26).

Male: Length, 2·32 mm.; breadth, 0·95 mm. Cuticle opaque, colour dark testaceous to brownish-red; eyes black; antennae, mouth-parts, and tarsi brownish-testaceous. *Head* with a broad and very shallow median longitudinal impression; surface with round granules nearly as coarse to two-thirds as coarse as facets of eyes and usually separated by one to one and a half diameters; from each granule arises a fine, recumbent, testaceous

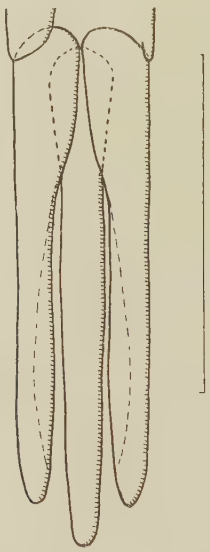


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Fig. 26.—*Stenelmis gardneri* sp. n. Dorsal view of male genitalia.

hair which is half again as long as its respective granule. Clypeus with fronto-clypeal suture fine, feebly impressed, straight; anterior margin, when seen from front, very shallowly, arcuately emarginate for its entire breadth and angle on each side broadly rounded; at middle base moderately strongly gibbous; surface sculptured like front of head. Labrum with anterior margin, when seen from front, broadly, feebly rounded and angle on each side very broadly rounded; surface for the most part with round punctures which are half as coarse as facets of eyes and are separated usually by one diameter. *Pronotum* with broadest point, which is across base, slightly broader than long (0·73 mm.: 0·71 mm.) and base broader than apex (0·73 mm.: 0·54 mm.). Anterior angles strongly produced forwards. Sides nearly straight; broadly, scarcely noticeably sinuate at apical third and more narrowly, very shallowly sinuate before basal angles. Sublateral carina extending from about basal seventh to about basal eighth, moderately broad and prominent, and at basal third completely interrupted by oblique impression which extends from near middle of pronotum.

Median longitudinal impression extending from near base to apical fourth, at middle about a third again as broad as scutellum, and at base very shallow but at middle nearly as deep as broad; on middle third of disk with sides of median impression about as strongly raised as anterior half of sublateral carina; near base on each side of scutellum with a moderately deep, oval puncture about three-fifths as broad as scutellum. Surface with shallow, indistinct punctures about half as coarse as facets of eyes and usually separated by one to two diameters; towards sides these punctures become coarser, more distinct, and denser; from each puncture arises a fine seta like those arising from cephalic granules. *Elytra* more than twice as long as pronotum (1·64 mm. : 0·71 mm.). Sublateral carina feebly raised and extending from near humeri to a point opposite middle of fourth abdominal sternite. Each elytron with a well-developed basal accessory row of five to six punctures. Intervals with third moderately convex (more prominent than sublateral carina) on basal two-thirds and strongly convex on basal fourth; second feebly convex at base; fourth feebly convex opposite end of sublateral carina; surface of intervals with sparse and very fine, testaceous setae. Striae nowhere distinctly impressed; strial punctures on basal half of disk very deep, round, half to two-thirds as broad as intervals, and separated longitudinally by one or a little more than one diameter. *Scutellum* flat, subovate, as long as broad (0·137 mm.), and surface opaque and sculptured like adjacent elytral intervals. *Prosternum* without carinae; prosternal process broad (about as broad as front coxae), subparallel, and with posterior margin broadly rounded; surface of prosternum sculptured similarly to head. Hypomera slightly more coarsely and densely punctate than sides of pronotum and also with numerous round granules. Metasternum with median longitudinal line complete, narrow, and moderately deep posteriorly; disk feebly depressed on each side of middle on posterior half; surface of disk with round to oval punctures which are half again as coarse as facets of eyes and are very dense, often confluent; sides of metasternum sculptured like disk but with an occasional granule. *Abdomen* with middle region of first sternite moderately depressed; lateral carinae prominent and nearly complete; second sternite with middle region feebly depressed and on each side with a prominent carina which extends to posterior fourth of segment; middle apical margin of fifth sternite with a shallow emargination nearly as broad as apex of fifth tarsal segment of hind leg. Surface of sternites with moderately fine, indistinct punctures and at sides also with a few fine granules. *Legs* with posterior face of hind trochanter with a fine but high tubercle. Tarsi with fifth segment slightly shorter than combined length of four basal (hind tarsi, 0·24 mm. : 0·30 mm.); ventral apex of fifth segment strongly produced at middle. Claws stout, without a basal tooth. *Genitalia* (fig. 26) as figured.

Female: Unknown.

Type: ♂ in the British Museum (Nat. Hist.). India: Burma, Tavoy, Mintha Sakan, 10.xi.1924, at light (*R. N. Parker*).

Comparative notes: This is not closely related to any of the previously described Indian species. From all species of the genus, except *S. semirubrum* Reitter (1889) of Sumatra, it may be distinguished by the remarkable structure of the second abdominal sternite. From *S. semirubrum* it may be distinguished by the strongly convex instead of nearly flat third elytral interval.

Stenelmis hafizi sp. n.

Female: Length, 2·46 mm.; breadth, 0·90 mm. Cuticle feebly to strongly shining; elytra brownish-red but with middle third and sutural interval darker; head, pronotum and apical segments of antennae black; basal segments of antennae, mouth-parts, and tarsi rufo-piceous; most of ventral surface black. *Head* without distinct impressions; surface with round to oblong granules which are as coarse to slightly coarser than facets

of eyes and are separated by one or less than one diameter; surface between granules finely and densely asperate; from each granule arises a fine, recumbent, brownish-testaceous seta. Clypeus with fronto-clypeal suture distinct and straight; anterior margin, when seen from front, moderately shallowly, arcuately emarginate for its entire breadth and angle on each side broadly rounded; surface sculptured like front of head. Labrum with anterior margin, when seen from front, broadly, feebly rounded and angle on each side very broadly rounded; surface with punctures which are finer than facets of eyes and are separated by about one diameter. *Pronotum* with broadest point, which is across basal two-fifths, nearly as broad as long (0·65 mm. : 0·68 mm.) and base broader than apex (0·57 mm. : 0·53 mm.). Sides broadly, very shallowly sinuate at apical third and again before hind angles. Sublateral carina extending from near base to apical two-fifths, broad, feebly raised, and at basal third only feebly interrupted by oblique impression which is deep on inner side of carina. Median longitudinal impression extending from basal seventh to apical seventh, obovate or nearly subparallel in shape, and at middle slightly broader than scutellum and two-thirds as deep as broad; impression near base on each side of scutellum about three-fifths as broad as scutellum, deep, and oval. Surface with round to feebly oblong, prominent granules which are as coarse to a third coarser than facets of eyes and are separated usually by one diameter; towards middle, particularly anteriorly, these granules become finer and sparser. Pubescence of pronotum moderately sparse and consisting entirely of fine hairs arising from granules, each hair being about twice as long as its respective granule. *Elytra* more than twice as long as pronotum (1·75 mm. : 0·68 mm.). Sublateral carina moderately prominent and extending from humeri to a point opposite posterior margin of third abdominal sternite. Each elytron with a basal accessory stria composed of seven or eight punctures. Intervals with third feebly convex near base and others flat or only very feebly convex; surface of intervals with round granules which are as coarse as facets of eyes and are separated by less than one to one and a half diameters; towards middle on apical third these granules are much finer and sparser; pubescence of intervals like that of pronotum but often slightly longer. Striae broad and feebly impressed; strial punctures on basal half of disk deep, usually round, as broad as intervals, and separated longitudinally by one or less than one diameter. *Scutellum* flat, subovate, longer than broad (0·11 mm. : 0·09 mm.), and surface granulate like adjacent elytral intervals. *Prosternum* without carinae; process subparallel, about half as broad as front coxae or about 0·109 mm. broad, and with posterior margin broadly rounded; surface sculptured like sides of pronotum but slightly more finely granulate. Hypomera with surface sculptured like sides of pronotum. Metasternum with median longitudinal line complete, moderately narrow, and moderately deep on posterior four-fifths; disk nearly flat and with low, oblong granules which are slightly coarser than facets of eyes and are separated by one-fifth to one-half a diameter; sides of metasternum granulate like sides of pronotum. *Abdomen* with middle region of first sternite not depressed; lateral carinae of first sternite absent; apical middle margin of fifth sternite broadly emarginate. Surface of sternites with round to oblong granules which are usually separated by less than one to one diameter. *Legs* with fifth tarsal segment slightly shorter than combined length of four basal (hind tarsi, 0·25 mm. : 0·35 mm.); ventral middle apex of fifth segment not produced. Claws moderately stout; each with a very feebly developed basal tooth.

Male: Unknown.

Type: ♀ in the British Museum (Nat. Hist.). India: Assam, Khasi Hills, 21.xi.1926 (*S. L. Hora*).

Comparative notes: Of the Indian species it is most closely related to *S. fissicollis* Champion (1923), but from the latter may be distinguished by its smaller size, bicoloured instead of unicoloured elytra, less prominent sublateral

carina of pronotum, and by the median pronotal impression which is shallower and does not extend to base. Its closest relative, however, is *S. nubifera* Fall (1902) of California, Oregon, and Washington. The size, colour, and general structure of these two species is extremely close but they may be distinguished as follows: (1) the pronotal granules of *hafizi* are high and rounded on top, whereas in *nubifera* these granules are low and usually flat-topped; (2) the median pronotal impression of *hafizi* does not extend beyond basal seventh, whereas that of *nubifera* extends to base, though near base it is very shallow; (3) the scutellum of *hafizi* is obovate and distinctly longer than broad, whereas that of *nubifera* is ovate and about as broad as long; and (4) the middle discal elytral intervals are coarsely and distinctly granulate, whereas this region of *nubifera* is without distinct granules.

Stenelmis minuta Grouvelle (1896) (fig. 27).

Female: Length, 2·57 mm.; breadth, 0·91 mm. Cuticle opaque to moderately strongly shining, colour black to rufo-piceous; antennae and tarsi dark rufo-piceous; ventral surface brownish-red; pubescence of dorsal surface grey with feeble golden reflections. *Head*

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Fig. 27.—*Stenelmis minuta* Grouvelle. Dorsal view of male genitalia.

without distinct impressions; surface with indistinct granules half to two-thirds as coarse as facets of eyes and separated usually by about two diameters; surface densely pubescent. Clypeus with fronto-clypeal suture straight, scarcely noticeable; anterior margin, when seen from front, moderately deeply, arcuately emarginate for its entire breadth and angle on each side obtusely rounded; surface sculptured like head. Labrum with anterior margin, when seen from front, feebly, very broadly rounded and angle on each side broadly rounded; surface with round punctures half to two-thirds as coarse as facets of eyes and usually separated by one diameter. *Pronotum* with broadest point, which is across basal third to basal two-fifths, not quite as broad as long (0·73 mm.: 0·84 mm.) and base broader than apex (0·65 mm.: 0·60 mm.). Sides broadly, shallowly sinuate at apical third and again more narrowly and shallowly so before hind angles. Sublateral carinae absent but with a broad, feeble gibbosity at middle nearer lateral margins than median impression. Median longitudinal impression extending from base to nearly apical fourth, at middle slightly narrower than scutellum and about two-thirds as deep as broad, and towards base narrower and shallower; sides of impression feebly raised. Oblique impression on middle sides oval, shallow, and broad; near base on each side of scutellum with a deep, oval pit

slightly more than a third as broad as scutellum. Surface with low, round to reniform granules which are slightly coarser than facets of eyes and are separated by one to less than one diameter; towards middle, particularly anteriorly, granules are very much finer and sparser; surface between granules densely, microscopically asperate; pubescence sparse to nearly absent on sides but on middle, particularly on side of median impression, very dense. *Elytra* twice as long as pronotum (1·69 mm. : 0·84 mm.). Sublateral carinae absent. Each elytron with a basal accessory stria. Third interval only feebly convex near base, other intervals flat; surface of intervals with granules as coarse to half as coarse as facets of eyes and separated by two to five diameters; pubescence of intervals short and very dense. Striae broad and distinct; strial punctures on basal half of disk deep, round to subquadrate, as broad to two-thirds as broad as intervals, and separated longitudinally by one or slightly more than one diameter. *Scutellum* flat, subovate, as broad as long (0·12 mm.), and surface opaque and with a few low, round granules. *Prosternum* without carinae; prosternal process about as broad as front coxae or about 0·20 mm. broad, subparallel, and with posterior margin feebly rounded; surface on sides, on process, and on posterior third with granules about as coarse as facets of eyes and separated by one to two diameters; surface of middle anterior two-thirds without distinct granules or punctures. Hypomera granulate like sides of prosternum but also with numerous interposed much finer granules. Metasternum with median longitudinal line nearly complete, deep, and narrow; disk nearly flat; surface of disk with round to oval, shallow punctures which are a third again as coarse as facets of eyes and are usually separated by less than one to one diameter; sides of metasternum granulate like hypomera. *Abdomen* with middle region of first sternite only feebly depressed and without distinct lateral carinae; middle apical margin of fifth sternite with a deep emargination which is nearly as broad as base of hind tibia. Surface of middle region of first sternite coarsely, indistinctly punctate and granulate like base of prosternum; surface elsewhere and on other sternites granulate like sides of metasternum but slightly more finely so. *Legs* with fifth tarsal segment slightly shorter than combined length of four basal (hind tarsi, 0·35 mm. : 0·41 mm.); ventral apex of fifth segment very feebly produced. Claws stout and without a distinct basal tooth.

Male: Externally similar to female except as follows: (1) a small, feebly raised gibbosity is on middle posterior face of hind trochanter; and (2) hind tibia has a low carina on inner side at apical two-fifths.

Specimens examined: 1 ♂, Java: Garoet, 15.iv.1909 (*G. E. Bryant*); 1 ♀, Java: Buitenzorg, 18.x.1923; and 1 ♀ and 1 ♂, Sumatra: Benkoelen, Lebong Tandai, 1920–23 (*C. J. Brooks*).

Stenelmis semirubrum Reitter (1889).

This species has only been recorded from Sumatra. Before me is a male from Java: Wijnkoopsbaai, Tji Solak, which agrees very well with a male I have been able to study from Sumatra.

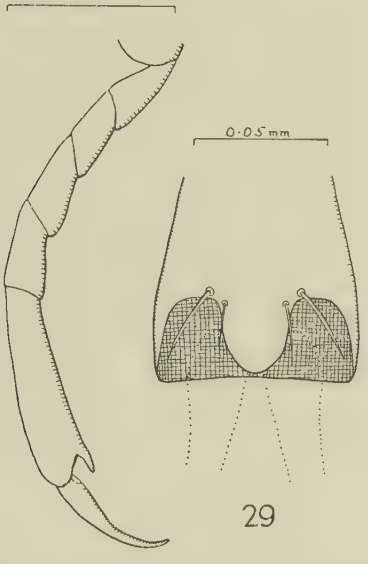
Leptelmis stricticollis (Grouvelle).

1896. *Stenelmis stricticollis* Grouvelle, *Notes Leyden Mus.* **18** : 45.
1896. *Stenelmis stricticollis* Grouvelle, *Ann. Mus. Stor. nat. Genova* (2) **17** : 49.

I have been able to examine the type of this species, which is in the British Museum, and find that it should be referred to the genus *Leptelmis* Sharp.

Stenelmis dolon sp. n. (figs. 28–29).

Female: Length, 2·8 mm.; breadth, 1·06 mm. Cuticle opaque to feebly shining, colour reddish-brown to rufo-piceous; antennae, mouth-parts, and legs brownish-testaceous; eyes black. *Head* with a very shallow, broad, median longitudinal impression; surface with round granules about two-thirds as coarse as facets of eyes and usually separated by one to two diameters; surface between granules very finely and densely alutaceous; each granule with a fine, testaceous, recumbent seta. Clypeus with fronto-clypeal suture indistinct, straight; anterior margin, when seen from front, truncate and anterior angles obtuse and moderately strongly produced forwards; middle, particularly near base, moderately strongly convex; surface sculptured like head. Labrum with anterior margin, when seen from front, feebly rounded and angle on each side very broadly rounded; surface for the most part with microscopic punctures which are usually separated



Figs. 28–29.—*Stenelmis dolon* sp. n. (28) Lateral view of hind tarsus. (29) Ventral view of apex of fifth segment of hind tarsus.

by one diameter. *Pronotum* with broadest point, which is across basal two-fifths, slightly broader than long (0·84 mm. : 0·81 mm.) and base broader than apex (0·76 mm. : 0·71 mm.). Sides nowhere distinctly sinuate. Sublateral carinae extending from very near base to apical two-fifths, broad, moderately prominent, and only very shallowly interrupted at basal third; on apical seventh with a feeble gibbosity which extends from lateral margin transversely to a point opposite anterior end of sublateral carina. Median longitudinal impression extending from base to apical third, shallow, nowhere more than two-thirds as broad as scutellum, and on basal fourth with sides moderately prominently raised; pronotum rather sharply declivient at middle before base; near base on each side of scutellum with a deep, oval puncture which is about two-fifths as broad as scutellum. Surface with round granules which are about as coarse as facets of eyes and are separated usually by one to two diameters; towards middle of disk, particularly anteriorly, granules become finer and sparser; pubescence of two types as follows: (1) from each granule arises a fine, recum-

bent, testaceous seta which is about twice as long as its respective granule; and (2) between granules from microscopic punctures are dense, short, very fine (scarcely visible at × 75), erect, testaceous hairs. *Elytra* more than twice as long as pronotum (1·97 mm. : 0·81 mm.). Sublateral carinae extending from base to opposite middle of fourth abdominal sternite and throughout its length very prominent. Each elytron without a basal accessory stria. Intervals with third on basal seventh moderately strongly and broadly convex; other intervals flat or nearly so; surface of intervals sculptured and pubescent like pronotum but with granules finer, much less distinct, and much sparser. Striae broad and at most very feebly impressed; strial punctures deep, round to subquadrate, on basal half of disk half as broad to slightly broader than intervals, and separated longitudinally by slightly more to slightly less than one diameter. *Scutellum* flat, subovate, slightly longer than broad (0·16 mm. : 0·15 mm.), and with surface opaque and sculptured like extreme base of pronotum. *Prosternum* without carinae; process 0·19 mm. broad or nearly as broad as front coxae, subparallel, and with posterior margin broadly and feebly rounded; surface of basal two-fifths and sides coarsely, rugosely punctate and with granules which are slightly coarser than facets of eyes and are usually separated by one to two diameters; surface of anterior middle three-fifths sculptured somewhat like anterior middle of pronotal disk. Hypomera sculptured like basal middle of prosternum. Metasternum with median longitudinal line nearly complete, narrow, and moderately deep; disk nearly flat and surface of disk with deep punctures which are nearly round, about two to three times as coarse as facets of eyes, and separated by one to one and half diameters; sides of metasternum sculptured like disk but more densely so and anterior margin of each puncture with a low granule which is about as coarse as an eye facet. *Abdomen* with middle region of first sternite strongly depressed and lateral carinae feeble, broad, and only extending to posterior half of segment; middle apical half of fifth sternite feebly, shallowly, and narrowly emarginate. Surface of sides of basal two sternites as coarsely punctate as metasternal disk but more densely so; surface elsewhere more finely and often more sparsely punctate than metasternal disk. *Legs* rather short; tarsi (fig. 28) with fifth segment slightly shorter than combined length of four basal (hind tarsi, 0·26 mm. : 0·32 mm.); fifth segment with middle ventral apex (fig. 29) strongly and broadly produced. Claws slender and each without trace of basal tooth.

Male: Unknown.

Type: ♀ in the British Museum (Nat. Hist.). Federated Malay States: Perak (*Doherty*).

Comparative notes: This is close to no species known to me. The following combination of characters will serve to distinguish it from all other described species: (1) colour red-brown; (2) antennae unicolorous; (3) sublateral carinae of pronotum broad, feebly prominent, and confined to basal three-fifths; (4) median longitudinal impression of pronotum very shallow at middle and deep on basal fourth where sides are prominently raised; (5) sublateral carinae of elytra extending from base to near apex and throughout their length very prominent; (6) each elytron without a basal accessory stria; (7) third elytral interval strongly convex near base; (8) disk of metasternum very coarsely and deeply punctate; (9) middle ventral apex of fifth tarsal segment strongly produced; and (10) claws slender and each without trace of a basal tooth.

Stenelmis seres sp. n. (fig. 30).

Male: Length, 2·46 mm.; breadth, 0·87 mm. Cuticle opaque to feebly shining, colour pale brownish-testaceous with eyes nearly black. *Head* without distinct impressions but front with a broad median longitudinal, shining band free of pubescence; surface with low,

round granules which are slightly finer than facets of eyes and are usually separated by one to two diameters. Clypeus with fronto-clypeal suture indistinct, nearly straight; anterior margin, when seen from front, nearly truncate and angle on each side obtusely rounded; surface sculptured like head but without a median, glabrous band and with granules at sides slightly coarser. Labrum with anterior margin, when seen from front, feebly rounded and angle on each side broadly rounded; surface on basal half nearly smooth and on most of anterior half with punctures which are about half as coarse as facets of eyes and are usually separated by one to two diameters. *Pronotum* with broadest point, which is about at middle, nearly as broad as long (0·68 mm. : 0·72 mm.) and base broader than apex (0·61 mm. : 0·54 mm.). Sides broadly, scarcely noticeably sinuate at basal third, elsewhere not distinctly sinuate. Sublateral carinae completely absent and surface nearly evenly convex. Median longitudinal impression two-thirds as broad as scutellum, shallow, and confined to middle fourth; near base on each side of scutellum with a moderately

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Fig. 30.—*Stenelmis seres* sp. n. Dorsal view of male genitalia.

shallow, oval impression which is about a third as broad as scutellum. Surface sculptured and pubescent like sides of front of head. *Elytra* more than twice as long as pronotum (1·64 mm. : 0·72 mm.). Sublateral carinae absent. Each elytron without a basal accessory stria. Intervals flat; surface of intervals with microscopic punctures usually separated by one diameter and with occasional fine, low, round granules; pubescence of surface nearly same colour as cuticle, short, and moderately dense. Striae broad and not distinctly impressed; strial punctures on basal half of disk moderately deep, round to subquadrate, two-thirds as broad as intervals, and separated longitudinally usually by one and a half to two diameters. *Scutellum* flat, subovate, not as broad as long (0·109 mm. : 0·137 mm.), and surface opaque and sculptured like adjacent elytral intervals. *Prosternum* without carinae; at middle anterior two-fifths with a deep, transverse impression; on middle adjacent to anterior margin with a prominent transverse ridge from the middle of which arises a long, acute tooth which is directed ventrally and caudally; prosternal process 0·14 mm. broad (or about three-fourths as broad as front coxae), subparallel, and with middle anterior margin feebly, narrowly emarginate; surface between transverse impression and anterior ridge smooth, elsewhere coarsely, rugosely punctate and with granules which are about as coarse as facets of eyes and are separated usually by one diameter. Hypomera sculptured

like sides of pronotum but with granules slightly coarser. Metasternum with median longitudinal line nearly complete, fine, and only feebly impressed; disk nearly flat; surface of disk not rugose and more finely and densely granulate than prosternum; sides of metasternum sculptured like disk. *Abdomen* with middle region of first sternite moderately depressed; lateral carinae of first sternite narrow and extending to posterior two-fifths of segment; middle apical margin of fifth sternite with a deep emargination which is slightly broader than base of hind tibia. Surface of sternites granulate similarly to metasternal disk. *Legs* with inner side of front tibia longitudinally concave on apical two-fifths; middle tibia broadly and deeply concave on apical third of anterior outer side; hind tibia concave like middle tibia. Tarsi with fifth segment slightly shorter than combined length of four basal (hind tarsi, 0·30 mm. : 0·41 mm.); ventral apex of fifth segment not produced at middle. Claws long, moderately stout, and each with a distinct basal tooth. *Genitalia* (fig. 30) as figured.

Female: Externally similar to male except as follows: (1) prosternum without transverse impression, without transverse anterior ridge, without median anterior tooth, and without median smooth area; (2) middle region of first sternite not noticeably depressed; and (3) apices of tibiae neither curved nor concave.

Type: ♂ in the British Museum (Nat. Hist.). Federated Malay States: Kedah, near Jitra Catchment Area, 11.iv.1928, at light (*H. M. Pendlebury*).

Paratype: 1 ♀ with same data as type.

Comparative notes: This is very different from any other described species, particularly as regards the combination of secondary sexual characters possessed by the male.

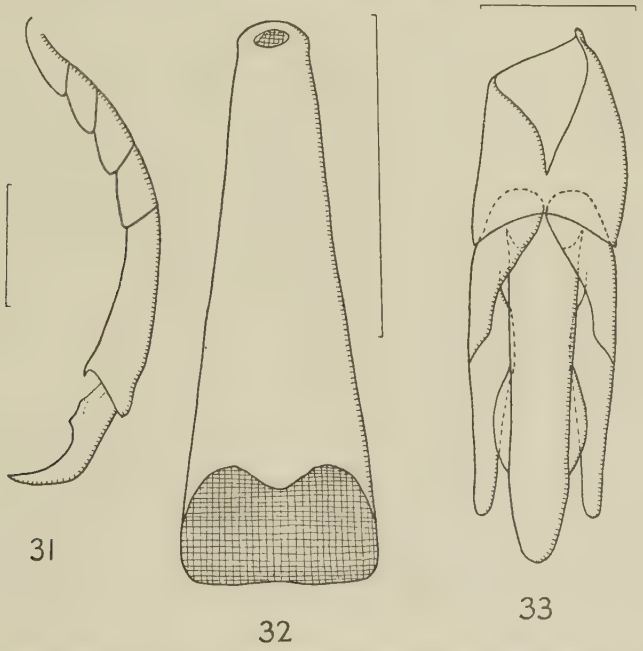
Stenelmis clavareaui Grouvelle (1900).

The original description of this species is based on a unique female from the Belgian Congo. Delève (1938) has recorded both males and females from various localities in the Belgian Congo and has listed the secondary sexual characters of the male. Before me are five females and two males, Cameroons (*D. R. Rosevear*). A further study of the secondary sexual characters shows that the male, in addition to possessing a high carina on inner side of middle and hind tibia, may be distinguished from the female as follows: (1) on the middle of the inner side of the front tibia is a low carina which in some individuals is absent; (2) the posterior side of the hind trochanter has a low, median tubercle; (3) the metasternal disk of the female is nearly flat, whereas that of the male has the posterior middle region moderately strongly depressed and the anterior middle region moderately strongly gibbous; and (4) the third elytral interval near base is usually distinctly more strongly convex in the female than in the male.

Stenelmis ares sp. n. (figs. 31–33).

Male: Length, 3·0 mm.; breadth, 1·34 mm. Cuticle opaque to feebly shining, colour black to dark rufo-piceous; each elytron with a red-brown vitta extending from near base to apical sixth and covering part of fourth and all of fifth intervals as well as inner part of sixth; antennae, mouth-parts, and tarsi rufo-piceous. *Head* with a shallow median longitudinal impression which is nearly glabrous; surface with low granules which are slightly finer than facets of eyes and are usually separated by one to two diameters; surface between granules densely alutaceous and punctate. Clypeus with fronto-clypeal suture nearly straight, obsolete at middle; anterior margin, when seen from front, truncate and angle on each side obtusely rounded; surface sculptured like that of head. Labrum with

anterior margin, when seen from front, very feebly rounded, nearly truncate and angle on each side broadly rounded; surface on basal fourth nearly smooth and elsewhere microscopically, densely punctate. *Pronotum* with broadest point, which is across basal third or two-fifths, nearly as broad as long (0·98 mm. : 1·01 mm.) and base broader than apex (0·87 mm. : 0·71 mm.). Sides broadly and moderately deeply sinuate at apical third, elsewhere moderately arcuate. Sublateral carina extending from very near base to apical third, prominent, broad, and at basal third broadly and nearly completely divided by oblique impression which is very broad and extends to median carina; at apical fourth from lateral margin a broad, moderately prominent gibbosity extends transversely inwards to join anterior end of sublateral carina. Median longitudinal impression extending from near base to apical fourth, subparallel, and at middle about half again as broad as scutellum and half as deep as broad; sides of median impression broadly carinate from basal seventh



Figs. 31–33.—*Stenelmis ares* sp. n. (31) Lateral view of tarsus of middle leg. (32) Ventral view of apex of fifth tarsal segment of middle leg. (33) Dorsal view of male genitalia.

to apical fourth; near base on each side of scutellum with an oval, moderately deep impression about a third as broad as scutellum. Surface with granules as coarse as facets of eyes and separated by one to three diameters; surface between granules densely, rugosely punctate; towards middle, particularly anteriorly, with granules finer, often nearly absent and with sculpture between granules finer and sparser; pubescence generally dense. *Elytra* more than twice as long as pronotum (2·19 mm. : 1·01 mm.). Sublateral carinae very prominent and extending from near base to a point opposite posterior margin of third abdominal sternite. Each elytron without a basal accessory stria. Intervals with third moderately convex on basal seventh; other intervals flat or nearly so; surface of intervals with microscopic (about a third as coarse as facets of eyes) punctures separated by one to three diameters and with occasional low, round granules; pubescence of intervals moderately sparse, nowhere (except on convex part of third) as dense as on pronotum. Striae broad and feebly to moderately impressed; strial punctures on basal half of disk deep,

round to subquadrate, about a fourth broader than intervals though occasionally narrower, and separated longitudinally by usually less than their diameters. *Scutellum* flat, subovate, longer than broad (0·19 mm. : 0·16 mm.), and surface sculptured like adjacent parts of pronotum. *Prosternum* without carinae; process 0·24 mm. broad (or nearly as broad as front coxae), subparallel, and with posterior margin scarcely noticeably sinuate at middle; surface coarsely rugose-punctate and with granules which are as coarse as facets of eyes and are usually separated by one to two diameters; anterior middle half with the granules finer, sparser and surface between granules much smoother. Hypomera sculptured like prosternal process but with granules denser and slightly coarser. Metasternum with median longitudinal line extending to anterior fifth, moderately shallow and narrow posteriorly, and much finer anteriorly; disk moderately depressed on middle posterior four-fifths; surface of disk sculptured similarly to prosternal process; sides of metasternum sculptured like sides of prosternum. *Abdomen* with middle region of first sternite moderately feebly depressed; lateral carinae of first sternite low, moderately narrow, and extending to posterior fourth of segment; middle apical margin of fifth sternite only narrowly and shallowly emarginate. Surface of middle region of first sternite sculptured like metasternal disk; surface elsewhere and on other sternites at sides slightly more finely sculptured than sides of metasternum and towards middle granules are replaced by shallow punctures which are about as coarse as facets of eyes and are usually separated by two diameters. *Legs* with fifth segment (fig. 31) of tarsus distinctly shorter than combined length of four basal (hind tarsi, 0·32 mm. : 0·38 mm.); middle ventral apex of fifth segment (fig. 32) feebly produced. Claws moderately stout and each with a scarcely noticeable basal tooth. *Genitalia* (fig. 33) as figured.

Female: Externally similar to male.

Type: ♂ in the British Museum (Nat. Hist.). Africa: Natal, New Hanover, 16.xii.1916 (*C. B. Hardenberg*).

Paratypes: 1 ♂ and 3 ♀♀ with same data as type.

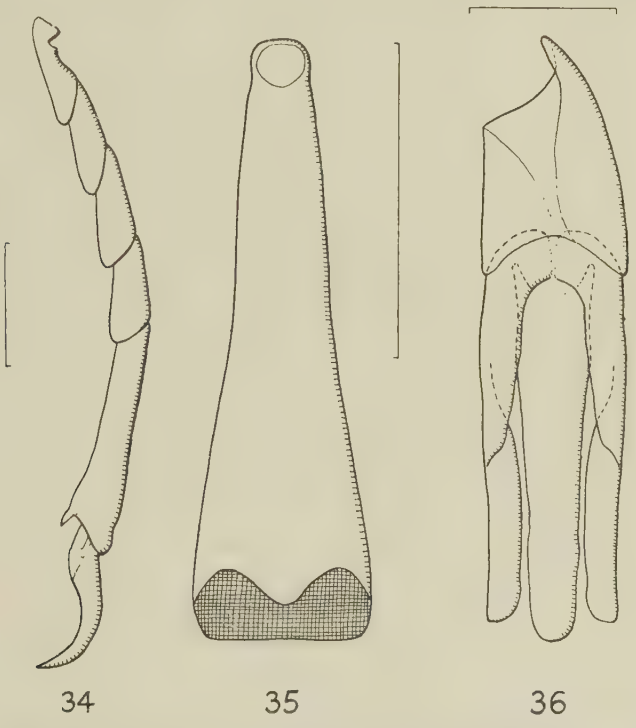
Variations: The basal portion of the third elytral interval is twice as strongly elevated in one of the females as in the type, while in the other two females and the male it is at least half again as strongly elevated.

Comparative notes: This is not close to any African species known to me. It is very close to *S. crenata* Say of North America, and on external characters I have been unable to distinguish the two. However, *S. seres* sp. n. may be distinguished from *S. crenata* Say by the structure of the male genitalia (*vide* Sanderson, 1938, pl. 80).

Stenelmis gades sp. n. (figs. 34–36).

Male: Length, 3·2 mm.; breadth, 1·35 mm. Cuticle feebly to moderately strongly shining, colour dark rufo-piceous; antennae, mouth-parts, and tarsi paler rufo-piceous. *Head* without distinct impressions; surface with more or less round, low granules which are slightly but distinctly finer than facets of eyes and are usually replaced by one to two diameters; surface between granules with microscopic punctures; from each granule arises a fine, testaceous, recumbent seta which is about twice as long as its respective granule. Clypeus with fronto-clypeal suture nearly straight, obsolete at middle; anterior margin, when seen from front, shallowly, arcuately emarginate for its entire breadth and angle on each side obtusely rounded; surface sculptured like front of head. Labrum with anterior margin, when seen from front, nearly truncate and angle on each side broadly rounded; surface with punctures which are about half as coarse as facets of eyes and are separated by one to two diameters; surface between these punctures very lightly, microscopically asperate. *Pronotum* with broadest point, which is across basal third, not quite as broad as long (0·93 mm. : 0·95 mm.) and base broader than apex (0·83 mm. : 0·71 mm.).

Sides deeply, broadly sinuate at apical third and shallowly and more narrowly so before basal angles. Sublateral carina represented by a broad, feebly raised gibbosity extending from basal to apical fourth and completely divided at basal third by oblique impression. Median longitudinal impression extending from basal fourth to apical fourth, subparallel, and broadest at basal third where it is about a third again as broad as scutellum and about a third as deep as broad; sides of median impression very broadly and moderately strongly raised; near base on each side of scutellum with a moderately deep, oval puncture which is about a fourth as broad as scutellum. Surface with round to irregularly shaped granules which are slightly coarser to slightly finer than facets of eyes and are usually separated by one to less than one diameter; towards middle these granules become finer, flatter, and



Figs. 34–36.—*Stenelmis gades* sp. n. (34) Lateral view of tarsus of hind leg. (35) Ventral view of fifth tarsal segment of hind leg. (36) Dorsal view of male genitalia.

sparser; surface between granules (except on sides and near base) densely, microscopically punctate (this sculpture is particularly distinct near middle anterior part of disk); pubescence of pronotum composed of fine, recumbent setae each of which arises from a granule and also with moderately dense, very short (scarcely visible at × 75), erect hairs. *Elytra* more than twice as long as pronotum (2·32 mm. : 0·95 mm.). Sublateral carinae extending from near base to a point opposite middle of second abdominal sternite and prominent throughout their length. Each elytron without a basal accessory stria. Intervals with third very feebly raised on basal seventh, others flat; surface of intervals with round, low granules which are about as coarse as facets of eyes and are separated by two to three diameters; basally and apically granules are finer and sparser; surface between granules microscopically punctate and feebly alutaceous; pubescence similar to that of pronotum and also with very short (scarcely visible at × 75), erect hairs which are moderately dense. Striae broad and feebly impressed; strial punctures on basal half of disk deep, round to

subquadrate, half to two-thirds as broad as intervals and separated longitudinally by one to one and a half diameters. *Scutellum* flat, subovate, longer than broad (0·16 mm. : 0·15 mm.), and surface shining and sculptured like adjacent parts of extreme base of elytra. *Prosternum* without carinae; process 0·16 mm. broad or about two-thirds as broad as front coxae, subparallel, and with posterior margin feebly, shallowly emarginate at middle; surface with round prominent granules about as coarse as facets of eyes and separated by one to two diameters; anterior middle region with granules much finer and sparser; sides with granules denser and slightly finer; surface between granules nearly smooth. Hypomera sculptured like sides of pronotum. Metasternum with median longitudinal line extending to anterior five-sixths and finely impressed; disk with sides moderately strongly depressed towards middle; surface of disk with round to irregularly shaped granules about as coarse as facets of eyes and separated usually by one to two diameters; surface between granules smooth; sides of metasternum granulate like hypomera but with granules slightly finer and denser. *Abdomen* with middle region of first sternite only feebly depressed; first sternite without distinct lateral carinae; apical middle margin of fifth sternite with a deep emargination which is nearly as broad as apex of first tarsal segment of hind leg. Surface of middle region of first sternite nearly smooth; surface elsewhere and on other sternites sculptured like sides of metasternum but with the granules becoming finer caudally and at middle often replaced by punctures of same size and density. *Legs* with posterior face of hind coxa with a small median tubercle. Middle and hind tibiae with a row of short, fine teeth on inner sides. Tarsi (fig. 34) with fifth segment distinctly shorter than combined length of four basal (hind tarsi, 0·38 mm. : 0·52 mm.); middle ventral apex of fifth segment (fig. 35) strongly produced. Claws moderately slender and each without a distinct basal tooth. *Genitalia* (fig. 36) as figured.

Female: Unknown.

Type: ♂ in the British Museum (Nat. Hist.). Africa: Natal, Estcourt, ii.1893 (*G. A. K. Marshall*).

Paratype: 1 ♂, S. Africa: Umtata, Transkei, 18.ii.–18.iii.1923 (*R. E. Turner*).

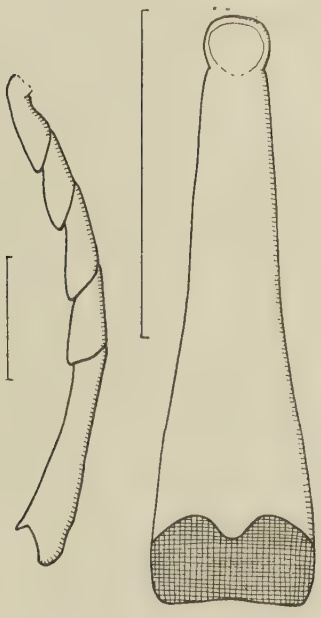
Comparative notes: This is close to none of the species known to me.

Stenelmis prusias sp. n. (figs. 37–38).

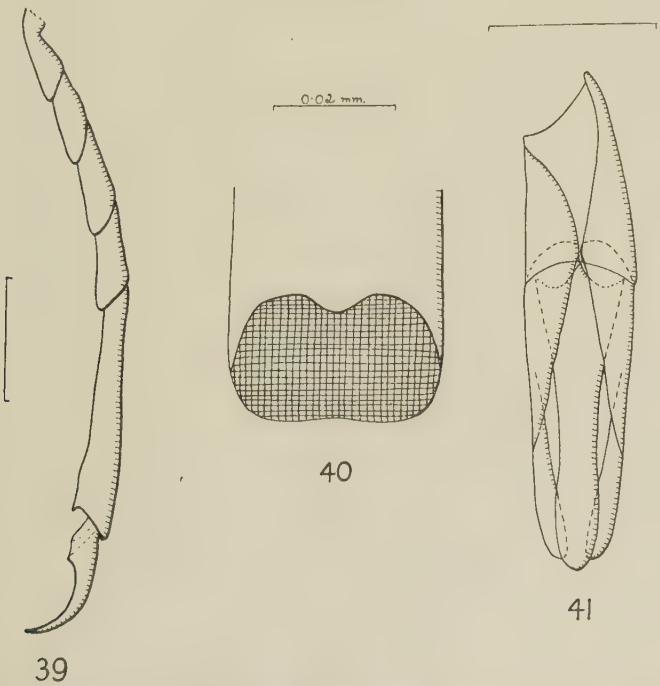
Female: Length, 3·0 mm.; breadth, 1·2 mm. Cuticle feebly to strongly shining, colour black to rufo-piceous; antennae, mouth-parts, and tarsi paler rufo-piceous; cuticle of sternum and part of legs with blue-grey reflections. Structurally very close to *S. gades* sp. n. except in the following particulars: (1) sublateral carina of pronotum extending from about basal sixth instead of basal seventh, broader, more prominent, and at basal third not completely divided by oblique impression; (2) median longitudinal impression of pronotum narrower (nowhere broader than scutellum instead of a third again as broad) and parallel instead of subparallel; (3) elytra with third interval moderately strongly raised instead of only slightly raised above adjacent intervals; (4) prosternum with surface on basal half between granules distinctly and coarsely rugose, whereas in *S. gades* sp. n. surface is there smooth; (5) disk of metasternum coarsely rugose-punctate and with a few granules, whereas in *S. gades* sp. n. disk is granulate throughout and surface between granules is smooth; and (6) middle region of first abdominal sternite with round granules which are slightly finer than facets of eyes and are separated by one to two diameters, surface between granules being coarsely and densely rugose-punctate, whereas in *S. gades* sp. n. middle region of first abdominal sternite is smooth.

Male: Unknown.

Type: ♀ in the British Museum (Nat. Hist.). Africa: Nyasaland Mlanje, 25.ii.1913 (*S. A. Neave*).



FIGS. 37–38.—*Stenelmis prusias* sp. n. (37) Lateral view of tarsus of hind leg. (38) Ventral view of fifth segment of hind tarsus.



FIGS. 39–41.—*Stenelmis hera* sp. n. (39) Lateral view of tarsus of hind leg. (40) Ventral view of apex of fifth tarsal segment of hind leg. (41) Dorsal view of male genitalia.

Stenelmis hera sp. n. (figs. 39–41).

Male: Length, 2·6 mm.; breadth, 0·84 mm. Cuticle feebly to strongly shining, colour black to rufo-piceous; antennae, mouth-parts, and tarsi paler rufo-piceous; sutural interval and extreme base of elytra, coxae, apical fourth of femora, and extreme base and apex of tibiae reddish-brown. *Head* without distinct impressions; surface with round granules which are about three-fourths as coarse as facets of eyes and are separated usually by about two diameters; surface between granules with microscopic (just visible at × 75) punctures separated by one to two diameters. Clypeus with fronto-clypeal suture nearly straight, obsolete at middle; anterior margin, when seen from front, truncate and angle on each side feebly rounded; surface sculptured like front of head. Labrum with anterior margin, when seen from front, nearly truncate and angle on each side very broadly rounded; surface with punctures which are about half as coarse as facets of eyes and are separated by one to two diameters. *Pronotum* with broadest point, which is across basal third to two-fifths, not as broad as long (0·71 mm.: 0·79 mm.) and base broader than apex (0·60 mm.: 0·55 mm.). Sides broadly, moderately feebly sinuate at apical third and scarcely noticeably sinuate before front and hind angles. Sublateral carinae absent or at most represented by a very feebly developed gibbosity on basal third. Median longitudinal impression extending from near base to apical fourth, subparallel, and at middle, where it is not quite as broad as scutellum, about half as deep as broad; sides of median impression not distinctly raised; near base on each side of scutellum with a deep, oval puncture which is about a third as broad as scutellum. Surface with low, round granules which are as coarse to two-thirds as coarse as facets of eyes and are usually separated by less than to one diameter; towards middle, particularly anteriorly, these granules become finer and sparser; pubescence composed of fine, recumbent, brownish-testaceous hairs each of which arises from a granule and is about half again as long as its respective granule. *Elytra* more than twice as long as pronotum (1·86 mm.: 0·79 mm.). Sublateral carina moderately feebly raised and extending from near base to a point opposite posterior margin of second abdominal sternite. Each elytron without a basal accessory stria. Intervals flat; surface of intervals with round, low granules which are slightly but distinctly coarser than facets of eyes and are usually separated by one to two diameters; on apical half granules are finer and sparser; surface between granules alutaceous and densely, microscopically punctate; pubescence of two types as follows: (1) recumbent setae arising from granules similar to setae of pronotum; and (2) moderately dense, recumbent, erect setae which are distinctly shorter than setae of granules and arise from microscopic punctures. Striae narrow, scarcely noticeably impressed; strial punctures on basal half of disk deep, round, a third to half as broad as intervals, and separated longitudinally by one to two diameters. *Scutellum* flat, subovate, longer than broad (0·137 mm.: 0·109 mm.), and surface opaque, smooth, and with an occasional granule. *Prosternum* without carinae; process 0·12 mm. broad or slightly more than half as broad as front coxae, subparallel, and with posterior margin broadly rounded; surface moderately coarsely rugose and with granules which are slightly finer to slightly coarser than facets of eyes and are separated by less than one to two diameters; surface of anterior middle two-fifths with granules slightly sparser and distinctly finer. Hypomera granulate like sides of pronotum. Metasternum with median longitudinal line nearly complete, narrow, and moderately deep; disk with sides feebly sloping downwards towards middle line; surface with low, round to irregular granules which are about as coarse as facets of eyes and are seldom separated by as much as one diameter; surface between granules strongly shining and usually smooth but occasionally with a coarse, shallow puncture; sides of metasternum sculptured like hypomera. *Abdomen* with middle region of first sternite very feebly depressed; first sternite without lateral carinae; emargination of middle apical margin of fifth sternite deep and nearly as broad as apex of fifth segment of hind tarsus. Surface of sternites sculptured like sides of meta-

sternum but towards middle with granules often replaced by punctures; granules and punctures become distinctly finer caudally. *Legs* unusually long (for this genus); with a round, moderately prominent tubercle on middle posterior side of hind coxa. Hind tibia with apical two-thirds of inner side flat to feebly concave and very densely punctate. Tarsi (fig. 39) with fifth segment slightly shorter than combined length of four basal (hind tarsi, 0·41 mm. : 0·49 mm.); middle ventral apex of fifth segment (fig. 40) feebly produced. Claws moderately slender and each with a feebly developed basal tooth. *Genitalia* (fig. 41) as figured.

Female: Externally similar to male except as follows: (1) hind coxa without a tubercle on posterior face; and (2) hind tibia without a flat or feebly concave, densely punctate area on apical two-thirds of inner side.

Type: ♂ in the British Museum (Nat. Hist.). AFRICA: Cameroons (*D. R. Rosevear*).

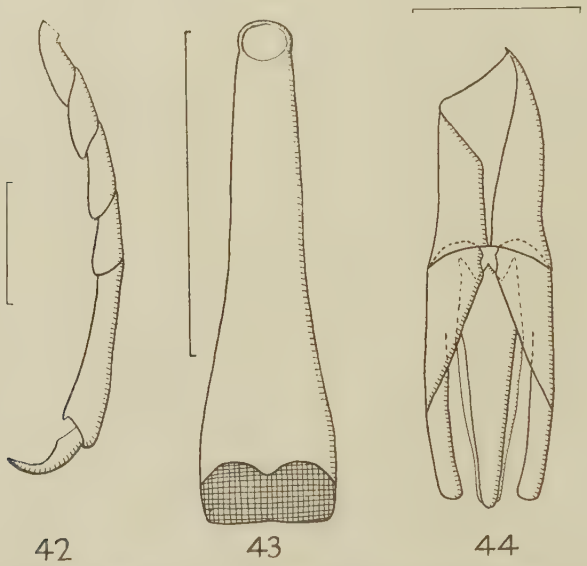
Paratypes: 2 ♀♀ and 3 ♂♂ with same data as type.

Comparative notes: This is close to no species known to me. From other described African species it may be distinguished by its slender form, unusually long legs, distinctive coloration, absence of pronotal sublateral carinae, and structure of the male genitalia.

Stenelmis thusa sp. n. (figs. 42–44).

Male: Length, 2·7 mm.; breadth, 0·95 mm. Cuticle moderately to strongly shining colour black to rufo-piceous; antennae, mouth-parts, and tarsi paler rufo-piceous to brownish-testaceous. *Head* with a broad, very shallow depression on middle of front; surface with round, prominent granules which are very slightly finer than facets of eyes and are usually separated by one to one and a half diameters; surface between granules with dense, microscopic punctures. Clypeus with fronto-clypeal suture very finely impressed and nearly straight; anterior margin, when seen from front, truncate and angle on each side feebly rounded; surface sculptured like head. Labrum with anterior margin, when seen from front, very feebly rounded, nearly truncate and angle on each side rounded; surface on basal third microscopically, transversely alutaceous; surface elsewhere with round punctures which are slightly more than half as coarse as facets of eyes and are separated by one to two diameters. *Pronotum* with broadest point, which is across basal third to two-fifths, not quite as broad as long (0·76 mm. : 0·79 mm.) and base broader than apex (0·66 mm. : 0·58 mm.). Sides broadly and moderately deeply sinuate at apical third, elsewhere not distinctly sinuate. Sublateral carina represented by a broad, feebly raised, non-carinate gibbosity which extends from basal fourth to apical two-fifths and at basal third is broadly and not quite completely interrupted by oblique impression; at middle between lateral gibbosity and sides of median impression with a moderately deep, oval impression. Median longitudinal impression extending from near base to apical fifth, subparallel, and at broadest point, which is at apical third, as broad as scutellum and about two-fifths as deep as broad; sides of impression moderately feebly and broadly raised on basal third; near base on each side of scutellum with a deep, oval puncture which is about a third as broad as scutellum. Surface with round to irregularly shaped granules which are usually slightly coarser than facets of eyes and are separated by one or less than one diameter; towards middle, particularly anteriorly, granules become flatter, sparser, and distinctly finer; surface between granules on base and sides not distinctly sculptured but on middle, particularly anteriorly, densely microscopically asperate; pubescence moderately sparse and consisting of fine, testaceous, recumbent hairs each of which arises from a granule and is about as long as its respective granule. *Elytra* more than twice as long as pronotum (1·94 mm. : 0·79 mm.). Sublateral carina moderately prominent and

extending from near base to a point opposite posterior margin of third abdominal sternite. Each elytron without a basal accessory stria. Intervals with third feebly raised near base but others flat; surface of intervals with low, indistinct granules which are slightly finer than facets of eyes and are usually separated by two to three diameters; towards apex granules become slightly finer and sparser; surface between granules moderately densely, transversely alutaceous and with numerous microscopic punctures; pubescence of intervals of two types as follows: (1) granules setose like those of pronotum; and (2) from microscopic punctures arise moderately dense, shorter hairs which are recumbent to erect. *Scutellum* flat, triangular, longer than broad (0·137 mm.: 0·11 mm.), and surface shining and sculptured like adjacent parts of sutural interval. *Prosternum* without carinae; process 0·13 mm. broad (or about five-eighths as broad as front coxae), subparallel, and with



FIGS. 42–44.—*Stenelmis thusa* sp. n. (42) Lateral view of hind tarsus. (43) Ventral view of fifth segment of hind tarsus. (44) Dorsal view of male genitalia.

posterior margin feebly rounded; surface feebly, coarsely rugose and with granules which are about as coarse as facets of eyes and are separated by one to one and a half diameters; anterior middle third with granules finer, denser, and surface between them smoother. Hypomera sculptured like sides of pronotum. Metasternum with median longitudinal line finely impressed and extending to anterior seventh; disk nearly flat; surface of disk with round to oval punctures which are as coarse to a third again as coarse as facets of eyes and are separated by one to one and a half diameters; surface between punctures with a few microscopic punctures and granules; sides of metasternum sculptured like hypomera but with the granules slightly denser and flatter. *Abdomen* with middle region of first sternite not distinctly impressed; lateral carinae of first sternite absent; middle apical margin of fifth sternite with the emargination moderately deep and about as broad as base of fifth segment of hind tarsus. Surface of middle region of first sternite sculptured somewhat like disk of metasternum; middle of other sternites without distinct granules and with punctures finer, particularly on posterior sternites; sides of all sternites sculptured like side of metasternum but with granules slightly finer (particularly on caudal sternites) and slightly denser. *Legs* with a prominent setose tubercle on posterior side of hind trochanter near proximal margin. Tarsi (fig. 42) with fifth segment shorter than combined

length of four basal (hind tarsi, 0·32 mm. : 0·41 mm.); ventral middle apex of fifth segment (fig. 43) only feebly produced. Claws slender and each without a distinct basal tooth. *Genitalia* (fig. 44) as figured.

Female: Externally similar to male but without a tubercle on posterior side of hind trochanter.

Type: ♂ in the British Museum (Nat. Hist.). AFRICA: Uganda, Lake Albert, Buhuka, 14.iv.1928 (*E. B. Worthington*).

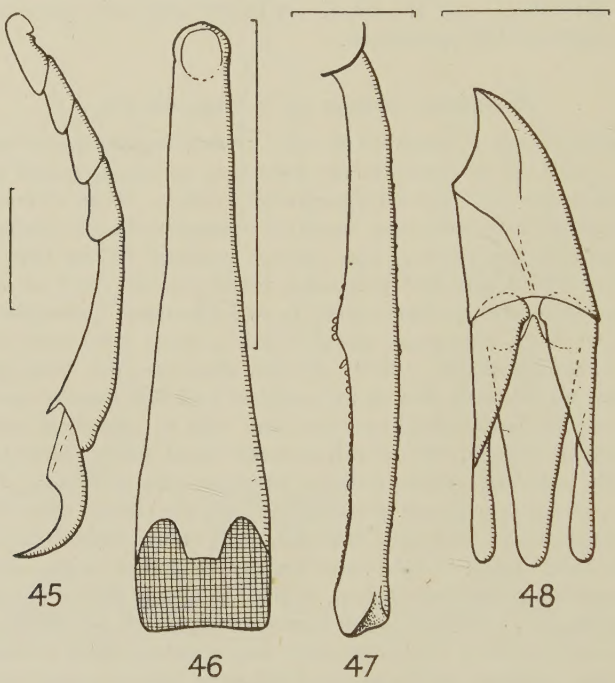
Paratypes: 2 ♂♂ and 4 ♀♀ with same data as type.

Comparative notes: This is close to *S. prusias* sp. n., but may be distinguished from the latter by its smaller size (2·7 mm. : 3·0 mm.), less developed sublateral carina of the pronotum, and the relatively larger and more prominent granules of the basal region of the pronotum.

Stenelmis merella sp. n. (figs. 45–48).

Male: Length, 3·0 mm.; breadth, 1·17 mm. Cuticle usually opaque but occasionally feebly shining, colour red to brownish-red; antennae, mouth-parts, and tarsi brownish-testaceous; pubescence of dorsal surface generally golden. *Head* without distinct impressions; surface on front with deep, round to irregularly shaped punctures which are about a third coarser than facets of eyes and are separated by less than to nearly one diameter; surface behind eyes with prominent, round granules which are distinctly finer than facets of eyes and are separated usually by two diameters; pubescence consisting of moderately dense, short, recumbent, golden hairs. Clypeus with fronto-clypeal suture finely impressed, nearly straight; anterior margin, when seen from front, arcuately, very feebly emarginate for its entire breadth and angle on each side broadly rounded; surface granulate like part of head behind eyes and also with an occasional coarse puncture. Labrum with anterior margin, when seen from front, broad, feebly rounded, and angle on each side broadly rounded; surface densely, microscopically punctate. *Pronotum* with broadest point, which is across basal two-fifths, very slightly broader than long (0·94 mm. : 0·93 mm.) and base broader than apex (0·84 mm. : 0·68 mm.). Sides broadly, very feebly sinuate at apical third and again before hind angles. Sublateral carinae absent. Median longitudinal impression moderately shallow, confined to middle third, and never more than three-fourths as broad as scutellum; sides of median impression not raised; near base on each side of scutellum with an oval, moderately deep puncture which is about a fourth as coarse as scutellum. Surface with round to oval, very deep punctures which are much coarser than facets of eyes or about 0·027 mm.–0·05 mm. broad and are confluent to separated (anteriorly) by one diameter; surface between these punctures with numerous microscopic punctures; pubescence more grey than that of head or elytra and of two types as follows: (1) from anterior sides of punctures arise fine, suberect hairs which are about as long as punctures; and (2) surface between punctures with slightly shorter, moderately dense, recumbent hairs. *Elytra* more than twice as long as pronotum (2·1 mm. : 0·93 mm.). Sublateral carinae moderately prominent and extending to a point opposite posterior margin of third abdominal sternite. Each elytron without a basal accessory stria. Intervals flat but with third near base scarcely noticeably raised; surface of intervals with microscopic punctures which are generally separated by one to two diameters; pubescence composed of dense, short, recumbent to suberect hairs each of which arises from a microscopic puncture. Striae broad, scarcely noticeably impressed; strial punctures on basal half of disk deep, round, usually about half as broad as intervals, and separated longitudinally by one to one and a half diameters. *Scutellum* flat, subovate, slightly longer than broad (0·16 mm. : 0·15 mm.), and surface opaque and nearly smooth. *Prosternum* without carinae; 0·24 mm. broad (very broad for this genus) or slightly broader than front coxae,

subparallel, each side moderately deeply sinuate at middle, and posterior margin feebly rounded, nearly truncate; surface coarsely rugose-punctate and with a few granules at sides; middle anterior three-fifths not rugose but with moderately dense, shallow punctures which are about half to two-thirds as coarse as basal ones. Hypomera sculptured like basal middle of prosternum and on posterior two-fifths with punctures slightly finer and also with numerous round, prominent granules which are nearly as coarse as facets of eyes and are usually separated by one to less than one diameter. Metasternum with median longitudinal line finely impressed (broader on posterior half) and nearly complete; disk feebly depressed on posterior three-fifths and feebly gibbous at middle on anterior three-fifths; surface of disk punctate like pronotum; sides of metasternum sculptured like



FIGS. 45–48.—*Stenelmis merella* sp. n. (45) Lateral view of hind tarsus. (46) Ventral view of fifth segment of hind tarsus. (47) Lateral view of hind tibia of male. (48) Dorsal view of male genitalia. This drawing is possibly inaccurate as the genitalia were very twisted in the only male before me.

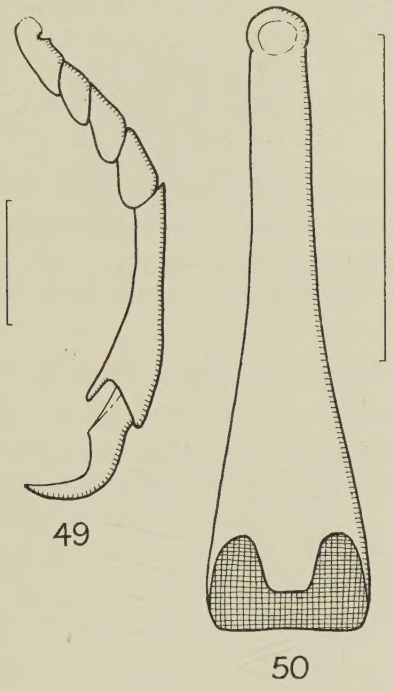
posterior fourth of hypomera. *Abdomen* with middle region of first sternite moderately depressed; lateral carinae of first sternite absent; emargination of middle apical margin of fifth sternite moderately deep and as broad as apex of fifth tarsal segment of hind leg. Surface of first sternite with deep, round to oval punctures which are as coarse as those of metasternal disk and are confluent to separated by half a diameter; second sternite only slightly more finely and sparsely punctate; sternites three to five more sparsely and very much more finely punctate; sides of all sternites also with fine, dense granules. *Legs* with a prominent tubercle on middle posterior margin of hind trochanter. Hind tibia (fig. 47) with a short but moderately prominent carina on middle of inner side. Tarsi (fig. 45) with fifth segment as long as combined length of four basal (0·35 mm., hind tarsus); middle ventral apex of fifth segment (fig. 46) strongly produced. Claws moderately stout and each without a distinct basal tooth. *Genitalia* (fig. 48) as figured.

Female: Externally similar to male except as follows: (1) posterior face of hind trochanter without tubercle; and (2) inner side of hind tibia without a carina.

Type: ♂ in the British Museum (Nat. Hist.). AFRICA: Sierra Leone, Njala, 15.xi.–8.xii.1939, at light (*E. Hargreaves*).

Paratypes: 2 ♀♀ with same data as type.

Comparative notes: This is related to *S. grouvellei* Alluaud (1933) and *S. bidenticulata* Delève (1938). From *S. grouvellei* it differs by its much smaller size (3·0 mm. : 4·0 mm.). *S. grouvellei* is so poorly and briefly described that it is not possible to give other differences between the two species. From *S. bidenticulata* the new species may be distinguished as follows: (1) size smaller,



FIGS. 49–50.—*Stenelmis nomia* sp. n. (49) Lateral view of front tarsus. (50) Ventral view of fifth segment of front tarsus.

3·0 mm. : 3·8–4·1 mm.; (2) punctures of front of head and of pronotum denser and relatively coarser; (3) pronotum more strongly convex; (4) disk of elytra without distinct granules, whereas in *bidenticulata* there are numerous low granules there; and (5) the median lobe of the male genitalia is broad and scarcely extends beyond apices, whereas in *bidenticulata* it is relatively narrower and extends considerably beyond apices of parameres.

Stenelmis nomia sp. n. (figs. 49–50).

Female: Length, 3·1 mm.; breadth, 1·26 mm. Cuticle opaque to feebly shining, colour red to brownish-red; antennae, mouth-parts, and tarsi brownish-testaceous; pubescence of dorsal surface golden; basal third of middle sides of pronotum grey-blue. In size and general appearance very similar to *S. merella* sp. n., but differs in the following particulars: (1) front of head with coarse punctures shallow, slightly coarser than facets of eyes, and

frequently separated by more than one diameter; (2) anterior margin of clypeus truncate at middle and with angle on each side obtusely, moderately strongly produced, whereas in *S. merella* sp. n. anterior margin of clypeus is arcuately, very feebly emarginate for its entire breadth and the angle on each side is not produced; (3) sides of pronotum on basal third are without distinct punctures but with very fine granules which are usually separated by two to three diameters, whereas in *S. merella* sp. n. sides are deeply, coarsely, and densely punctate; (4) third elytral interval near base is moderately strongly convex instead of being only scarcely noticeably raised above others; (5) surface of intervals on disk with numerous fine, low granules, whereas in *S. merella* sp. n. there are no granules; and (6) surface of hypomera throughout without distinct punctures and with granules which are slightly but distinctly finer than facets of eyes and are usually separated by less than to one and a half diameters, whereas in *S. merella* sp. n. the anterior half of hypomera is very coarsely, deeply, and densely punctate and has no distinct granules.

Male: Unknown.

Type: ♀ in the British Museum (Nat. Hist.). AFRICA: Kamerun (*Conradt*).

Microdinodes transvaalica (Grouvelle).

1895. *Stenelmis transvaalica* Grouvelle, *Ann. Soc. ent. Fr.* **64**: 167, fig.

Although I have seen no specimens of this species, the original description and figure is that of a typical member of the genus *Microdinodes* Grouvelle (1906).

Microdinodes simoni (Grouvelle).

1895. *Stenelmis simoni* Grouvelle, *Ann. Soc. ent. Fr.* **64**: 168, fig.

A careful study of the original description and figure of this species shows that it should be placed in the genus *Microdinodes* Grouvelle (1906).